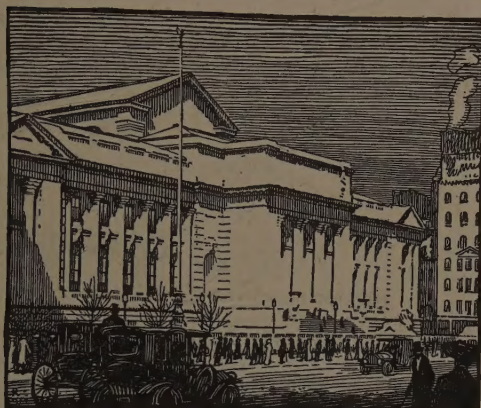
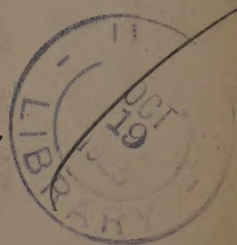


BULLETIN

OF THE

NEW YORK PUBLIC LIBRARY

ASTOR, LENOX AND TILDEN FOUNDATIONS



SEPTEMBER, 1925

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LIBRARY
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MANUSCRIPTS AND BOOKS OF HENRY GEORGE

MEMORIES of a gallant fighter are evoked at sight of the manuscripts and books by and relating to Henry George recently presented to the Library by Anna George de Mille. Mrs. de Mille is the daughter of Henry George and wife of the playwright, William Churchill de Mille. Henry George's two campaigns for mayor of New York, the world-wide circulation of his famous book, his own high character, and the industry and care with which he prepared his works, make him an attractive and interesting figure. Mrs. de Mille has put a mass of valuable source material at the disposal of the public.

The letters cover the period of 1854 to George's death in the midst of that second dramatic campaign for mayor of New York in 1897. His diary begins with 1855, when as a boy of sixteen he shipped before the mast for a voyage to Australia and India, and it is continued — with intermissions — until the year before his death. There is the original manuscript of "Progress and Poverty," the printer's copy of "The Science of Political Economy," and numerous drafts of magazine articles, lectures, speeches and addresses in this country and Europe. The attached list gives in detail the record of manuscripts.

Printed books add seven editions of "Progress and Poverty" in English to the twelve already in the Library. There is also a copy of the "author's edition," San Francisco, 1879, with numerous manuscript notes and comments by the writer. "The Science of Political Economy" is represented by a Toronto reprint issued in 1905 with title "The Art of Getting a Living." Four editions in English of "The Condition of Labor," three of

"The Land Question," three of "A Perplexed Philosopher," and one of "Social Problems" increase the number of those works already here.

The universal appeal of the man and his preachings is indicated by the fact that translations of his works appear in Danish, Dutch, German, Italian, Norwegian, Polish, Russian, Spanish, Swedish; to say nothing of the commentaries in Danish, Dutch, German, and Japanese.

There are two bound volumes of pamphlets and speeches, with several hundred pamphlet copies of speeches and magazine articles on the many subjects he was interested in. As might be expected, newspaper clippings form a prominent part of the collection. One volume is made up of clippings relating to public affairs in San Francisco while he resided there. Another consists of his letters to "The Irish World" in 1881-1882; three cover his visit to Great Britain in 1884; four relate to the mayoralty campaign of 1886; two consist of clippings relating to "Progress and Poverty," and one of reviews of "Protection and Free Trade."

Besides these there are hundreds of clippings and posters relating to his visit to Australia; his controversy with Herbert Spencer; the second mayoralty campaign of 1897; and to the many other topics that interested this versatile character.

The detailed record of the manuscripts stands as follows:

HENRY GEORGE MANUSCRIPTS

CORRESPONDENCE, 1854-1897:

Loose letters, 1,725 pieces.

Letter-press copy book, 1869, Jan. 11-June 25. 1 volume.

Letter-book, 1878-1881. 1 volume.

Letter copy book, 1881, Nov. 9-Dec. 30. 1 volume.

Letter copy book, 1882, Jan. 7-March 25. 1 volume.

Letter copy book, 1882, March 28-June 8. 1 volume.

Letter copy book, 1882, June 13-Aug. 4. 1 volume.

DIARY, 1855-1896, with omissions as follows:

1855-1856. Voyage on the *Hindoo* to Australia and India, 2 pieces.

1855-1856. Three incomplete fair copies of the above.

1864, 1 volume.

1865, Feb. 17-March 5. 2 pieces.

1865, Feb. 17-1866, Nov. 5. 1 volume.

HENRY GEORGE MANUSCRIPTS, *continued**Diary, 1855 - 1896, etc., continued:*

- 1867, March 13 - Nov. 14. 1 volume.
 1868, Jan. 1 - Nov. 29. 1 volume.
 1869, Jan. 1 - Dec. 24. 1 volume.
 1869, Apr. 19 - June 4. 1 volume.
 1870, Apr. 19 - Dec. 8. 1 volume.
 1871, Feb. 20 - November 27. 1 volume.
 1875, Jan. 6 - Dec. 13. 1 volume.
 1876, Jan. 7 - Dec. 28. 1 volume.
 1877, Feb. 24 - Dec. 5. 1 volume.
 1878, (Oct.) 12 - Nov. 30. } 1 volume.
 1865, March 25 - Apr. 8. }
 1879, Jan. 1 - Dec. 18. 1 volume.
 1881, Jan. 6 - June 17. 1 piece.
 1883, Jan. 9 - 1884, May 9. 1 volume.
 1883, May 17 - Dec. 31. 1 volume.
 1884, Jan. 1 volume.
 1887, Jan. 1 - Nov. 6. Merely shows whereabouts of Mr. George.
 1 volume.
 1889, Jan. 8 - Dec. 21. 1 volume.
 1889, Nov. 12 - Dec. 23. 1 piece.
 1890, Jan. 21 - Dec. 31. 1 volume.
 1891, March 30 - Nov. 1. 1 piece.
 1892, Jan. 7 - Nov. 4. 1 piece.
 1896, [?], Jan. 31 - March 5. 1 piece.

WRITINGS:

Books:

- "Progress and Poverty." Original draught. 544 pages.
 — English translation of preface to Swedish edition. Typewritten
 with manuscript emendations. 4 pages.
 "The Science of Political Economy." Printer's copy.
 — 17 additional typewritten sheets with manuscript emendations.
 Unidentified book. Letter-press copy. Incomplete. 1 volume.

HENRY GEORGE MANUSCRIPTS, *continued*

ARTICLES:

- "A Plea for the Supernatural." (1865.) Transcript.
- "Abraham Lincoln." Editorial in the "Daily Alta California," April 23, 1865. Typewritten copy.
- "Concerning General Grant." Autograph Document.
- "Garfield or Hancock." (1880.) Galley proof. 2 sets. (Not printed.)
- "England and Ireland." (1882.) Autograph Document.
- "The Irish Question from an American Standpoint." Autograph Document Signed.

LECTURES AND SPEECHES:

- Speech made at San Francisco during the Presidential election of 1776. A. D.
- Lecture given at Midland Institute, Birmingham, England, Jan. 23, 1884. Transcript.
- "The Eighth Commandment." A. D.
- "Moses." A. D. with galley proof.
- Address made at the City Hall, Glasgow, August 20, 1890. Transcript.
- Speech in the House of Representatives, March 9, 1893. Typewritten.
- Lecture on the New Constitution. A. D.
- Two unidentified lectures. A. D. 2 pieces.

LECTURE NOTES:

- Brooklyn Revenue Reform Club, Feb. 14, 1883. A. D.
- Binghampton, England, April 12, 1883. A. D.
- "Wanted—A Democratic Party." Brooklyn Revenue Reform Club, March 12, 1883. A. D.
- "Malthusian Theory." A. D.
- Lecture on woman suffrage. A. D.
- Unidentified lecture notes. 16 pieces.
- Report prepared for Abram S. Hewitt for use in a Congressional investigation. 1881. A. D.
- Miscellaneous writings. 13 pieces.

HENRY GEORGE MANUSCRIPTS, *continued*

NOTES:

- Note book containing rules for sending newspaper dispatches. c. 1870.
1 volume.
- Note book containing code used in sending telegrams to newspapers.
1 volume.
- Note book, 1882. 1 volume.
- Note book, 1883-1884. 1 volume.
- Note book, 1884. 1 piece.
- Note book, 1884-1885. 1 volume.
- Note book, n.d. 1 volume.
- Note book, n.d. 1 volume.
- Loose notes, 58 pieces.
- Account book, 1863. 1 volume.

MISCELLANEOUS MANUSCRIPTS:

- Phrenological Chart of Henry George as given by Prof. Wells, March 13, 1869. 1 piece.
- Personal visiting card of Georges Clemenceau with note in acknowledgment of a copy of "Progress and Poverty." A. D.
- Memorial of testimonial dinner to Henry George, Wednesday, April 30, 1884. New York. 1 volume.
- Address of welcome to Henry George and Mrs. George by the Single Tax League of New South Wales, March 1890. Illuminated manuscript in tooled leather case. 1 piece.
- Address of welcome to Henry George from the Land Reformers of South Australia, April 19, 1890. Illuminated manuscript in tooled leather case, 1 piece.
- Miller, Samuel W. Account of the *Hindoo's* voyage to Australia and India at the time when Henry George was foremost boy aboard her. April 7, 1855-June 10, 1856. Original and transcript. 2 pieces.
- [Mendelson, Simon.] Diary of a trip to Bermuda in company with Mr. and Mrs. Henry George, January 22-March 15, 1891. A. D. 1 volume.
- Lamennais, [Hugues Félicité Robert] de. "Words of a Believer." Translated from the French by C. Richard Heath. 1887. 1 piece. Miscellanies, 40 pieces.

HENRY GEORGE, JR., MANUSCRIPTS

CORRESPONDENCE, 1881-1916. 153 pieces.

Includes biographical material relative to his father, letters of condolence on the death of his mother, etc.

NOTES AND MISCELLANIES. 42 pieces.

GENEALOGICAL MATERIAL relative to the Pratt, Fennell, Vallance, and Shaw families. 4 pieces.

LETTERS to Hamlin Garland, chairman of dinner given at the Hotel Astor, New York, in commemoration of the twenty-fifth anniversary of the publication of "Progress and Poverty," January 24, 1905. Among them are letters from Bernard Shaw, Joaquin Miller, Richard Le Gallienne, Ernest Thompson Seton, William Lloyd Garrison, and Edwin Markham. The last named enclosed five of his poems. A typewritten copy of William Jennings Bryan's address at the dinner is filed with these papers. 43 pieces.

MRS. HENRY GEORGE MANUSCRIPTS

CORRESPONDENCE, 1862-1898. 45 pieces.

Included are ten letters from Helen Taylor, step-daughter of John Stuart Mill; and letters of condolence from Edwin R. A. Seligman, Seth Low, and William Lloyd Garrison. There is also a letter from Samuel Gompers.

THE LIBRARY CELEBRATES A CENTENNIAL

THERE is, perhaps, a fairly general impression, in the minds of those who have any opinion whatever on the subject, that the pioneer public library of New York City was the Astor Library, incorporated in 1849 and consolidated in 1895 with the Lenox Library and the Tilden Trust to form The New York Public Library. Such persons will be mildly surprised to learn that the Harlem Library, now a part of the consolidated library corporation, goes back nearly a quarter of a century further—to September 13, 1825, the date of the first meeting.

To call attention to this anniversary there was opened in the small exhibition room (No. 112) in the Central Building a display of books, manuscripts, maps and prints selected to tell something about the town and library of Harlem since the town was founded in 1660 and the library in 1825.

No need to tell here the story of the Harlem Library, and to recall how it grew out of the distribution of the Commons that for generations had lain between the sleepy town at the northeast end of the island of Manhattan and the faster growing city to the southward. Whether Harlem would have had a library if its Commons had not stood as a problem for the village fathers for many a year is a matter of opinion. Certainly it got one because about a century ago the question of what to do with those lands that had so long been "productive of great Trouble, Expence, and Vexation to both Parties" was on the point of settlement. The City was extending its streets and avenues to the northward as the commissioners had suggested in their report made in 1807, and one of the problems that bothered both communities was what to do with the lands between the City and Harlem. In 1820 the Legislature authorized their sale by trustees, and directed the trustees to give, from the money thus received \$3,000 to the Harlem Library, \$4,000 to the Harlem School, and other sums to churches and schools as specified. It is now possible for us to trace with great detail just how this money was distributed, for in the Riker papers, which came as a gift from the Title Guarantee and Trust Company, were the manuscript minutes and file papers of the trustees charged with the sale of these lands. And with the papers of the Harlem Library, which was incorporated with The New York Public Library in 1903, were the manuscript minutes of the trustees of the Library and of the trustees of the Harlem School that had been born at the same time as the Library in 1825 and had, in 1872, joined forces with it.

The first meeting of the Harlem Library was held on September 13, 1825, when Dr. Samuel Watkins was chosen president and was directed

to secure an act of incorporation. From that date the Library led an honored existence for nearly eighty years, an existence of varied activities, some years, fighting for life, some years with little beyond the obvious routine to record.

With the papers of the Harlem Library and the Harlem School, and with the manuscripts and other documents collected by James Riker, the historian of Harlem, in possession of The New York Public Library, it seemed fitting to use this anniversary as the occasion for a display of books and other material illustrative of the town and library of Harlem. This includes the original records of the town from 1662, the minute books of the Harlem Library and the Harlem School, the minutes and papers of the commission appointed by the Legislature for sale of the Commons, and other manuscripts, books, prints, and views relating to the town and its citizens.

Miss Carolyn G. Thorne, librarian of the Harlem Library branch, and Mr. Victor Hugo Paltsits, chief of the Division of American History in the Reference Department, have worked together to bring out this story, and to them must be given the thanks of all who find such things worthy of interest.

A GIFT OF THEATRE PROGRAMMES

MISS GABRIELLE DU SAULD has made a gift to the drama collection of some interesting items from the seventies and eighties of the last century. First in point of time comes a copy on silk of the "grand special performance" at the Grand Opera House in Ottawa on February 18, 1879, when Sardou's "Diplomacy" was produced before the Governor-General, the Marquis of Lorne, and his wife, Her Royal Highness the Princess Louise. Miss Du Sauld took the part of the Countess Zicka.

The fiftieth performance of Jefferson, Taylor, and Nugent's "Great Aquatic Spectacle 'A Dark Secret,' A Thrilling Tale of the Thames Valley, by Messrs. Jas. Willing, Jr., and John Douglas of London, England," at the Academy of Music, on Monday evening, November 7th, 1887, is marked by a programme on paper elaborately mounted on satin. Miss Du Sauld has added the manuscript note: "The first play with a tank covering the whole stage, full of water. Jefferson, son of Joseph Jefferson."

Next are two play bills for special performances of Steele Mackaye's "Hazel Kirke." The first, on silk, records the fiftieth night in the Madison Square Theatre on West 24th Street, in New York City, March 22, 1880. The second, on satin, tells of the one hundredth performance on Tuesday evening, May 11th, following. This is in three parts, with the cast on one page, the synopsis on the third, and the second given to photographs of nine of the characters: Dolly, Pitty Green, Mercy, Dunstan, Hazel, Arthur, Met, Lady Travers, and Rodney. Miss Du Sauld also gave two photographs, one showing her alone in the character of Dolly Dutton in this play, and the other with C. W. Couldock who had the part of Dunstan Kirke. Programme and photographs bring to mind, besides the charm of the play, the interest Mackaye took in the mechanical equipment of this theatre and the double stage he had invented.

Another fiftieth performance is marked by a programme, this one on paper, issued for Bartley Campbell's "Separation" at the Union Square Theatre on the 17th of March, 1884, when Miss Du Sauld played Mlle. Florine and had with her Miss Effie Ellsler, who was Hazel Kirke in the Mackaye play. In "Separation" she took the part of Mabel Blair.

Salvini's "Adieu to America" had a four-page programme, with a portrait of the actor and the cast of the company supporting him at Booth's Theatre on Saturday, April 28, 1883. Lewis Morrison played Iago to the Italian actor's title role.

There is also a programme on paper of "Bootle's Baby" with Miss Du Sauld as Helen Grace.

Miss Du Sauld gave also photographs of herself in various characters: "Our Bachelors," as "Camille," the "Dark Secret," "Won at Last," and

Dion Boucicault's "Marriage," the latter given at Warren's Theatre in Boston, in 1877.

A portrait of Henry C. Jarrett, her first manager, bears the following note: "Jarrett and Palmer (not A. M. Palmer) were the managers of Booth's Theatre, 23rd Street and Sixth Avenue, in 1875-6. They produced 'Henry V' on a grand scale and visited all large cities in the country except San Francisco. Geo. Rignold came from England to play the King. I was Alice, my first part. Some differences caused Geo. to go to Frisco alone. Jarrett and Palmer kept the cast together and as an advertisement sent the principals on that famous sixty-miles-an-hour train from here to California, — Lawrence Barrett, the great Bishop, and others, and representatives of the press, — no, not the ladies — on that train. Two houses played 'Henry V' at the same time. Not for me to say who was the best. Having played with both, and both Alice and Kate, I esteemed them alike. Barrett was a great actor. Geo. Rignold looked, and was, every inch a king. It was a great enterprise for Jarrett and Palmer."

Another "portrait" is of more than ordinary interest. This one reproduces "Flash," a skye terrier, about whom Miss Du Sauld writes: "Yes, he acted too. For over one hundred nights at the Madison Square Theatre in 'Prince Karl' supporting Mr. Richard Mansfield. He knew his cues, time when to go to the theatre, and how to look at the audience to get his round of applause. Salary? Yes, a lovely silver collar with five bells, each with a letter of his name spelling 'Flash.' A silver ball himself. A stage hand would call for him safely. He only got lost in the play."

Besides the programmes and portraits one finds various autographs. A note in French from Chas. Fechter, whom Miss Du Sauld calls to mind as the original Armand in Dumas' "Camille." Lawrence Barrett's signature is dated June 9, 1876, at San Francisco, "where he played in opposition to Geo. Rignold in Henry V. *We* had the cast and scenery, but Geo. *was* Henry V. San Francisco kept saying: 'Entre les deux mon cœur balance' — I think Rignold broke many *cœurs* while it lasted."

Rignold's is marked by a note reading: "I cannot tell what is *baiser, en English*," and Miss Du Sauld's comment is: "The handsome 'Henry V' at Booth's Theatre, 1876. He was glorious in the last act on a white charger, and a fine actor."

John McCullough's signature was likewise written at San Francisco, this on the 19th of June, 1876.

Dion Boucicault has a letter of recommendation of Miss Du Sauld, dated at New York, on the 10th of January, 1879, and the manuscripts are completed by the contract between Steele Mackaye and Miss Du Sauld, dated at New York on the 28th of July, 1879.

Another item of unusual interest is a badge of the first Actors' Fund Fair, held in 1892 in Madison Square Garden.

NEWS OF THE MONTH

GIFTS IN AUGUST, 1925

DURING the month of August, 1925, there were received as gifts, 3,639 volumes, 9,442 pamphlets, 113 maps, and 23 prints. Some of the more interesting and important of these gifts were the following:

From Mrs. Anna George de Mille came a collection of books, pamphlets, manuscripts, clippings, photographs, etc., relating to Henry George. The collection comprised 94 volumes, 256 pamphlets, 10 engravings, 56 photographs, etc.

The American Federation of Labor, Washington, D. C., presented to the Library a large collection of clippings, photographs, and other material, relating to Samuel Gompers.

From Miss Gabrielle Du Sauld came a collection of photographs, engravings, programmes, letters, etc., mainly relating to her career on the American stage.

Miss Grace Bigelow gave 117 volumes, 284 pamphlets, 12 periodicals, 2 maps, etc., chiefly government documents. From the Hon. Franklin D. Roosevelt came a copy (no. 13 of 50 privately printed from the original manuscript in the possession of Mr. Roosevelt) of the "Minutes of the Council of Appointment of New York, April 4, 1778 — May 3, 1779," with Introduction by Dorothy C. Barck, Hyde Park, N. Y., 1925. Mrs. George Kennan, Medina, N. Y., gave a collection of Russian material (15 volumes, 8 pamphlets, and 22 periodicals), including Dr. N. B. Slyunin's description of the Okhotsk-Kamchatka Region (2 volumes) and four volumes of the rare periodical, "Messenger of the Will of the People."

Mrs. Edward J. Tytus, London, and the Metropolitan Museum of Art, New York City, gave a copy of the "Publications of the Metropolitan Museum of Art, Egyptian Expedition, Robb de Peyster Tytus Memorial Series, Volume 4, The Tomb of Two Sculptors at Thebes, by Norman de Garis Davies," New York, 1925.

Interesting collections were received from the following: From Miss Dorothy Barney, 73 volumes, 6 pamphlets; from Mr. Alvin Seaward Van Benthuyzen, 50 volumes and 8 pamphlets; from the Rand School of Social Science, 1,198 volumes, 805 pamphlets, and 1,144 periodicals; and from the Union League Club of New York, 330 volumes and 11 pamphlets.

The following additions were made through gift to the Library's Print collection: From Mr. George O. Hart, Coytesville, N. J., came three proofs (lightly inked, heavily inked, and printed in light and dark brown) of his "Bathing Beach" (aquatint, soft ground, and dry point). Mr. H. Lindley Hosford, St. Paul, Minn., gave three of his etchings ("On the

St. Croix," "Haunt of the Heron," and "After the Shower"). Miss Agnes Potter presented, in memory of Dr. Lewis Clover Potter, two framed, colored lithographs of Van Tassel's House, Irving's Residence on the Hudson. From Dr. Le Roy Crummer, Omaha, Nebraska, came a reproduction of a drawing by Laura Knight (portrait of Dr. Crummer).

ADDITIONS AND USE OF THE LIBRARY IN AUGUST, 1925.

DURING the month of August, 1925, there were received at the Library 11,201 volumes and 10,317 pamphlets. (These included the additions to both Reference and Circulation Departments.) The total number of readers recorded in the Central Building was 108,424. They consulted 229,410 volumes. Visitors to the building numbered 276,756.

NEW PERIODICALS

- A. R. A. Association** review. New York. Quarterly.
Official organ of The American Relief Administration Association.
- Advertising and merchandising helps.** New York. Monthly.
Published by The Society for Electrical Development.
- Anthracite.** Philadelphia. Monthly.
Published by The Anthracite Operators' Conference.
- Argentina.** — Dirección General de Yacimientos Petrolíferos Fiscales.
Boletín de informaciones petrolíferas, yacimientos e industrias. Buenos Aires. Monthly.
- Arizona labor journal.** Phoenix, Ariz. Weekly.
Official organ of Arizona State Federation of Labor.
- The Arkansas banker.** Little Rock, Ark. Monthly.
- Atlantic Deeper Waterways Association.**
President's letter. Philadelphia. Monthly.
- Beseda.** Berlin. Irregular.
- The Bombay Chronicle.** Bombay, India. Daily.
- Botanikai közlemények.** Budapest. Irregular.
Published by Királyi Magyar Természettudományi Társulat.
- Brockton & South Shore shoe magazine.** Brockton, Mass. Bi-monthly.
- Brooklyn new journal** (and Brooklyn-Brownsville post). Brooklyn. Weekly.
- Canada.** — Statistics Bureau. Preliminary monthly report. Vital statistics. Ottawa. Monthly.
- Canada Royal Bank.** Monthly letter. Montreal. Monthly.
- Catholic Club of the City of New York.** Bulletin. New York. Monthly.
- Central Corporation of Banking Companies.** Economic bulletin. Budapest. Irregular.
- Chicago Tribune and Daily News.** Paris edition. Paris. Daily.
- Club de engenharia de Pernambuco.** Boletim de engenharia. Pernambuco, Brazil. Quarterly.
- La Coiffure française illustrée.** Paris. Monthly.
- The Communist International.** London. Monthly.
Official organ of the Executive Committee of the Communist International.
- Corsets and lingerie.** New York. Monthly.
- Curtis Lighting, Inc.** Architectural detail plates. Chicago. Quarterly.
- Czechoslovakia.** — Bankovi Urad. Bulletin. Prague. Weekly.
- The Duluthian.** Duluth, Minn. Weekly.
- The Echo.** Denver, Col. Monthly.
- Einigkeit.** Hamburg. Weekly.
Organ des Deutschen Nahrungs- und Genussmittelarbeiter Verbandes.
- Der Emes.** Moscow. Daily.
Official organ of The Russian Communist Party. Printed in Yiddish.
- L'Enfant.** Paris. Monthly.
- Europäische Revue.** Leipzig. Monthly.
- Evening News.** Sydney, Australia. Daily.
- The Evening Tribune.** Lawrence, Mass. Daily.
- Fantasia.** South Pasadena, Cal. Monthly.
- The Fighting forces.** London. Quarterly.
A quarterly magazine for the Royal Navy, The Army and The Royal Air Force.
- Finland.** — Statistiska Centralbyrån. Statistiska översikter. Helsingfors, Finland. Monthly.
- 42nd Street Property Owners & Merchants Association.** Activities. New York. Irregular.
- The Forum.** Stockton, Cal. Weekly.
- Die Friedensbewegung.** Trier, Germany. Semi-monthly.
- Harefuah.** Jerusalem. Irregular.
A medical journal published by The Jewish Medical Organisation in Palestine.
- Heatid.** Warsaw. Weekly.
Printed in Yiddish.
- Industrielle Psychotechnik.** Berlin. Monthly.
- International arts.** New York. Monthly.
- The International patents journal.** London. Monthly.
- International Typographical Union.** Bulletin. Indianapolis, Ind. Monthly.
- Der Inzel.** New York. Monthly.
Printed in Yiddish.
- Jaffa & District.** — Chamber of Commerce. Bulletin. Jaffa, Palestine. Twice a week.
- Jewish review and observer.** Cleveland. Weekly.
- Jugoslavenska njiva.** Zagreb, Yugoslavia. Semi-monthly.
- Keramos.** Bamberg. Monthly.

- Kommunisticheskaya Akademiya.** Mezhdunarodnaya letopis'. Moscow. Monthly.
— Vestnik. Moscow. Bi-monthly.
- Kommunisticheski international.** Moscow. Monthly.
- Krasnaya zvezda.** Moscow. Daily.
- Kulturwille.** Leipzig. Monthly.
- Die Kunst.** München. Monthly.
Monatshefte für freie & angewandte Kunst.
- The Lawrence Telegram.** Lawrence, Mass. Daily.
- Leonardo.** Roma. Monthly.
Rassegna mensile della coltura italiana.
- Lithuania.** — Ministerijos Svietmo: Svietimo Ministerijos Menesinis Laikrastis. Svietimo darbas. Kaunas, Lithuania. Monthly.
- Magyar chemiai folyóirat.** Budapest. Monthly.
Published by Királyi Magyar Természettudományi Társulat.
- Martinique.** Journal officiel: Fort-de-France, Martinique. Weekly.
- Mensch en maatschappij.** Amsterdam. Bi-monthly.
- The Mesa.** Colorado Springs, Col. Quarterly.
Published by The Colorado Springs Poetry Society.
- Mexico of today.** Houston, Tex. Monthly.
Travel, trade, finance, lands, oils, minerals.
- Moriah.** Frankfurt am Main. Monthly.
Monatsschrift für den Aufbau von Erez Jisroel im Geiste der Thora.
- Motor world.** Glasgow. Weekly.
With which are incorporated *Motor cyclist* and *Scottish cyclist*.
- National farm poultry journal.** Minneapolis. Monthly.
Successor to *Northwestern poultry journal*.
- National Institute of Industrial Psychology.** Journal. London. Quarterly.
- Nevada tax review.** Reno, Nevada. Irregular.
Published by Nevada Public Economy League.
- New York.** — State Agricultural and Farm Management Department. Farm economics. Ithaca, N. Y. Irregular.
- New York Academy of Medicine.** Bulletin. New York. Monthly.
- The New York Herald.** Paris edition. Paris. Daily.
- North Carolina.** — Conservation and Development Department. Natural resources. Raleigh, N. C. Bi-weekly.
- Pan,** poetry and youth. Notre Dame, Ind. Monthly.
- La Patria.** Montreal, Canada. Daily.
- Pécsi dolgozatok.** Pécs. Irregular.
Publication of Magyar Királyi Erzsébet-Tudománygyetem.
- Pedagogicheskoye Byuro po Dyelam Srednei i Inzhei Russkoi Shkoli Zagranitsei.** Byulleten. Prague. Irregular.
- Pennsylvania.** — Bureau of Municipalities. Mimeographed pamphlet. Harrisburg, Pa. Irregular.
- Pótfüzetek a természettudományi közlönyhöz.** Budapest. Quarterly.
Published by Királyi Magyar Természettudományi Társulat.
- The Riga Times.** Riga, Latvia. Daily.
- Rome.** — Segretario General del Comune Capitolium. Roma. Monthly.
- St. Paul's Ecclesiological Society.** Transactions. London. Five nos. a year.
- Die Schaulade.** Bamberg. Monthly.
- Shrine of wisdom.** London. Quarterly.
- South African cotton growers' journal.** Durban, South Africa. Monthly.
- Sunday Times.** Johannesburg, Transvaal. Weekly.
- El Taquígrafo Gregg.** New York. Quarterly.
Published by The Gregg Publishing Co.
- The Taxpayer.** Minneapolis. Monthly.
Official organ of The Minneapolis Taxpayers Association.
- Technik und Wirtschaftswesen.** Hamburg. Monthly.
Herausgegeben vom Deutschen Nahrungs- und Genussmittelarbeiter Verband.
- Természettudományi közlöny.** Budapest. Monthly.
Published by Királyi Magyar Természettudományi Társulat.
- The U. F. A.** Calgary, Alberta. Three times a month.
Official organ of The United Farmers of Alberta.
- Wellesley alumnae quarterly.** Wellesley, Mass. Quarterly.
- The Western magazine.** St. Paul. Monthly.
- White Russia.** — Belorusski Gosudarstvennyi Universitet. Trudy. Minsk, U.S.S.R. Irregular.
- White Russia.** — Narodny Kamisaryyat Asvety. Abvesnik. Minsk. Semi-monthly.
— Asveta. Minsk. Bi-monthly.
- White Russia.** — Narodny Kamisaryyat Zemlyarobstva. Plug. Minsk. Monthly.
- White Russia.** — Sovet Narodnykh Komissarov. Ekonomicheskoye soveshchaniye. Narodnoye khozyaistvo. Minsk. Bi-monthly.
- White Russia.** — Tzentralnyi Ispolnitelnyi Komitet. Sovetskoye stroitel'stvo. Minsk. Irregular.
- Yidische filologye.** Warsaw. Bi-monthly.
A journal of Yiddish philology, devoted to the study of Yiddish language, literature and folklore.
- Zarnitza.** New York. Monthly.
- Zeitwende.** München. Monthly.

CHEMISTRY AND MANUFACTURE OF WRITING AND PRINTING INKS

A LIST OF REFERENCES IN THE NEW YORK PUBLIC LIBRARY

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PART II

245. **Hinrichsen**, Friedrich Willy, and **RICHARD KEMPF**. Über den Einfluss der Luftbeschaffenheit und der Temperatur des Cersuchsraumes auf den Ausfall der Haltbarkeitsprobe bei Eisengallustintenn. illus. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 32, 1914, p. 536-538.)
VA
Untersuchungen über Eisengallustintenn. Mitteilung 73.
Abstract in Society of Chemical Industry. *Journal*, London, v. 34, 1915, p. 1260-1261, *VOA*; *Chemisches Zentralblatt*, Berlin, Folge 5, Jahrg. 19, p. 809-810, *PKA*; *Chemical abstracts*, Easton, Penn., v. 9, 1915, p. 2155, *PKA*.
246. **Hinrichsen**, Friedrich Willy, and **EUGEN SACHSEL**. Über die Bildungs- und Löslichkeitsverhältnisse der Doppelchloride des Eisens und der Alkalimetalle. (Zeitschrift für physikalische Chemie, Leipzig, Bd. 50, 1905, p. 81-99.) **PKA**
247. **Hlasiwetz**, H. Ueber die Beziehungen der Gerbsäuren, Glucoside, Phlobaphene und Harze. (Journal für praktische Chemie, Leipzig, Bd. 105, 1868, p. 360-383.) **PKA**
248. **Hochstetter**, Robert. The relation of the printer to the ink maker. (British printer, London, v. 28, 1915, p. 25-26, 63-64.) **†* IPA**
The vice-president of the Ault and Wiborg Company offers suggestions on the use of printing ink.
249. **Hoefer**, Jean Chrétien Ferdinand. Histoire de la chimie. Paris: Firmin Didot frères, fils, et C^{ie}, 1866-69. 2 v. 2. ed. 8°. **PKB**
See index.
- Hofmann**, J., joint author. See **Robertson**, A., and **J. HOFMANN**.
250. **Holding**, H. B. Modern improvements in black ink making. (Penrose's annual, London, v. 13, 1907-08, p. 61-63.) **MDSA**
Describes manufacture of carbon black.
251. **Holmes**, Fred L. Reusing old newspapers for printing. illus. (Popular mechanics, Chicago, v. 38, 1922, p. 685-686.) **VFA**
Use of bentonite.
252. The **Home** of the Ullman doubletone — a famous U. S. A. ink factory. illus. (British printer, London, v. 24, 1911, p. 63-65.) **†* IPA**
253. How carbon-black is made. (Inland printer, Chicago, v. 15, 1895, p. 601.) **†* IPA**
254. How to make gold ink. (Inland printer, Chicago, v. 35, 1905, p. 862.) **†* IPA**
255. How a pressman succeeded with copying ink. (Inland printer, Chicago, v. 30, 1903, p. 912.) **†* IPA**
256. How to prevent ink from rubbing off enameled surfaces. (Inland printer, Chicago, v. 23, 1899, p. 347.) **†* IPA**
257. How printing ink dries. (British printer, London, v. 25, 1912, p. 96-97.) **†* IPA**
258. How waste paper is used in paper mills. Paper shortage would be reduced and householders make pin money by paper saving. (Scientific American supplement, New York, v. 83, 1917, p. 155.) **VA**
Brief description of de-inking.
259. **Huber**, J. M. Testing and drying inks. (British printer, London, v. 30, 1918, p. 257.) **†* IPA**
260. **Illuminating Engineering Society**. — Committee on Glare. Diffusing media. III. Paper and inks. illus. (Illuminating Engineering Society. Transactions, v. 10, 1915, p. 379-387.) **VOK**
Includes tests on printing and writing inks.
261. Immoderate reducing of ink. (Inland printer, Chicago, v. 43, 1909, p. 568.) **†* IPA**
Trouble with printing on blotting-paper.
262. **India** ink. (Engineering news, New York, v. 11, 1884, p. 157.) **VDA**
263. **Indian** ink. (All the year round, London, new series, v. 41, 1887, p. 329-332.) *** DA**

264. **Indulin-Tinte.** (Dinglers polytechnisches Journal, Augsburg, Bd. 207, 1873, p. 430.) **3-VA**
See also Chemical Society. *Journal*, London, v. 26, 1873, p. 959, *PKA*.
The above are abstracts referring to the recipe of Couplier and Collin.
265. **The Ink of the ancients.** (Society of Chemical Industry. *Journal*, London, v. 21, 1902, p. 196.) **VOA**
Examination of ink remains found in bronze cylinders in ruins of Roman villa at Vertault, France.
266. **Ink does not lift properly.** (Inland printer, Chicago, v. 43, 1909, p. 245.) **†* IPA**
267. **Ink drying slowly.** (Inland printer, Chicago, v. 43, 1909, p. 405.) **†* IPA**
268. **Ink drying slowly.** (Inland printer, Chicago, v. 47, 1911, p. 104.) **†* IPA**
Suggestion for bronze-blue.
269. **An Ink eradicator.** (Inland printer, Chicago, v. 33, 1904, p. 556.) **†* IPA**
270. **Ink fades.** (Inland printer, Chicago, v. 43, 1909, p. 405.) **†* IPA**
Recommends the use of alkaline proof ink.
271. **The Ink man to the printer.** (British printer, London, v. 31, 1918-19, p. 213-214.) **†* IPA**
272. **Ink not lifting properly.** (Inland printer, Chicago, v. 42, 1909, p. 578.) **†* IPA**
273. **Ink pellets.** (Chemical review, London, v. 11, 1882, p. 262.) **3-VOA**
See also Society of Chemical Industry. *Journal*, London, v. 1, 1882, p. 388, *VOA*.
274. **Ink to print on rubber and not rub off.** (Inland printer, Chicago, v. 31, 1903, p. 733.) **†* IPA**
275. **Ink for printing on leather.** (Inland printer, Chicago, v. 30, 1903, p. 575.) **†* IPA**
276. **Ink for printing on linen.** (Inland printer, Chicago, v. 31, 1903, p. 734.) **†* IPA**
277. **An Ink for printing out.** (British journal of photography, London, v. 56, Jan. 29, 1909, p. 86.) **MFA**
278. **Ink-proving colour blocks.** (British journal of photography, London, v. 60, March 14, 1913, p. 213.) **MFA**
Apparatus of Wratten and Wainwright.
279. **Ink pump.** (Inland printer, Chicago, v. 44, 1909, p. 409.) **†* IPA**
280. **Ink reducer and effect.** (Inland printer, Chicago, v. 25, 1900, p. 795.) **†* IPA**
Formula.
281. **Ink reducers and driers.** (Inland printer, Chicago, v. 31, 1903, p. 231.) **†* IPA**
282. **Ink and rollers.** (Scientific American, New York, v. 89, 1903, p. 344.) **VA**
283. **Ink for rubber stamps.** (Scientific American supplement, New York, v. 55, 1903, p. 22699.) **VA**
284. **Ink rubs off.** (Inland printer, Chicago, v. 43, 1909, p. 881.) **†* IPA**
Use of drier for broom labels.
285. **Ink rubs off and does not dry.** (Inland printer, Chicago, v. 41, 1908, p. 587.) **†* IPA**
Failure of ink on satin proof stock, using a tin block.
286. **Ink for silk ribbon.** (Inland printer, Chicago, v. 42, 1908, p. 264.) **†* IPA**
287. **Ink slow in drying.** (Inland printer, Chicago, v. 27, 1901, p. 713.) **†* IPA**
Suggestion for overcoming.
288. **An Ink solvent.** (Inland printer, Chicago, v. 39, 1907, p. 870.) **†* IPA**
"Dead oil" (carbolic acid) for removing dry ink from rollers.
289. **Ink that holds on one thickness of coated paper but not on another.** (Inland printer, Chicago, v. 30, 1902, p. 53.) **†* IPA**
290. **Ink too strong for the coated paper.** (Inland printer, Chicago, v. 29, 1902, p. 787.) **†* IPA**
291. **Ink for writing on glass.** (American Pharmaceutical Association. Proceedings, Philadelphia, 1870, p. 161.) **WTA**
292. **Inks.** (Engineer, London, v. 123, 1917, p. 415.) **† VA**
Included in a continued article entitled "What industry owes to science." Historical and general.
293. **Inks for colour printing.** (British printer, London, v. 28, 1915, p. 123.) **†* IPA**
294. **Inks for rubber stamps.** Glycerine the best medium. illus. (India rubber journal, London, v. 62, 1921, p. 578.) **VMV**
Investigation at the British General Postoffice.
Abstracted in Society of Chemical Industry. *Journal*, London, v. 40, 1921, p. 780A, *VOA*.
295. **Inks for use on glass.** (Chemical abstracts, Easton, Penn., v. 1, 1907, p. 770.) **PKA**
Abstract from *Diamant*.
296. **Insufficient drier.** (Inland printer, Chicago, v. 43, 1909, p. 103-104.) **†* IPA**
Use of drier in label printing.
297. **Invention for deinking newsprint paper.** (Paper, New York, v. 22, March 13, 1918, p. 23.) **VMPA**
Description of patent issued to J. J. Werst (U. S. 1249375 of 1917).
298. **Invisible ink.** (Inland printer, Chicago, v. 58, 1916, p. 382.) **†* IPA**
299. **Iorio, Adrian J.** Making the ideal catalogue: ink, its qualities and specifications. (British printer, London, v. 27, 1914, p. 205-207.) **†* IPA**
300. **Irvine, Robert.** Note on the action of bleaching agents upon writing-ink as a means of detecting fraud. (Society of Chemical Industry. *Journal*, London, v. 6, 1887, p. 807-808.) **VOA**
Abstract in Chemical Society. *Journal: Abstracts*, London, v. 54, 1888, p. 764, *PKA*.

301. J., H. Blue marking ink. (Society of Chemical Industry. Journal, London, v. 2, 1883, p. 276.) **VOA**
302. Jacobi, Charles Thomas. Printing. A practical treatise on the art of typography as applied more particularly to the printing of books. London: George Bell & Sons, 1908. 3 p.l., (i)viii-xxiii, 409(1) p., 1 l., 16 specimens of paper. 4. ed. rev. illus. 12°. * **IPR**
 Brief general chapters on printers' ink.
303. Jacobsen, Emil. Copirtintenfärbung. (Chemisch-technisches Repertorium, Berlin, Jahrg. 1874, Halbjahr 2, p. 62-63.) **VOA**
304. —. Waschächte schwarze Zeichentinte. (Chemisch-technisches Repertorium, Berlin, Bd. 5, 1866, Halbjahr 1, p. 2.) **VOA**
 Also in *Dingler's polytechnisches Journal*, Augsburg, Bd. 183, 1867, p. 78, 3-VA; *Polytechnisches Notizblatt*, Mainz, Jahrg. 21, 1866, p. 377-378, VA.
305. Jacquemin, E. Le pyrogallol en présence des sels de fer. (Académie des sciences. Comptes rendus, Paris, tome 77, 1873, p. 593-596.) * **EO**
 Abstract in *Chemical news*, London, v. 28, 1873, p. 194, PKA.
306. Jameson, J. On security of documents. (Society of Chemical Industry. Journal, London, v. 4, 1885, p. 318.) **VOA**
 Brief reference to the importance of mordants in inks.
307. Jameson, Lewis. Manufacturers' practical recipes, by Lewis Jameson, assisted by leading English and foreign trade experts, works managers, and skilled mechanics. London: Lewis Jameson & Co. [1902-03.] 4 v. 8°. **VBA**
 See v. 4, p. 597-721 for an unusually large number of recipes for writing fluids and copying media. See v. 2, p. 28-71 for printing inks and lithographic varnishes.
308. Jamieson, Alexander. A dictionary of mechanical science, arts, manufactures, and miscellaneous knowledge. . . . London: Henry Fisher, Son, & Co., 1827. iv, 1066 p. illus. 4°. † **VB**
 See p. 513-514.
309. Japan in inks. (Inland printer, Chicago, v. 45, p. 750-751.) †* **IPA**
310. Japanese writing accessories. (Japan magazine, Tokyo, v. 2, May, 1911, p. 47-48.) * **OSA**
 Also in *Scientific American supplement*, New York, v. 73, 1912, p. 115, VA.
311. Jean, Ferdinand. A propos du titrage du tannin par la solution d'iode; réponse à la note de M. Cormimboeuf. (Annales de chimie analytique, Paris, tome 12, 1907, p. 426-427.) **PKA**
312. —. Dosage du tannin et de l'acide gallique. (Annales de chimie analytique, Paris, tome 5, 1900, p. 134-140.) **PKA**
313. —. Observations sur le dosage du tannin assimilable et le titrage du tannin et de l'acide gallique. (Annales de chimie analytique, Paris, tome 3, 1898, p. 145-149.) **PKA**
314. Jenkinson, Hilary. A manual of archive administration; including the problems of war archives and archive making. Oxford: Clarendon Press, 1922. xviii, 243 p. 4°. (Economic and social history of the world war. British series.) * **SAD**
 See index under *Ink and Materials*.
315. Jenks, Tudor. About old ink-stands. illus. (St. Nicholas, New York, v. 31, 1904, p. 532-536.) * **DA**
316. Johnson, Charles. The care of documents and management of archives. London: Society for Promoting Christian Knowledge, 1919. 47 p. 12°. (Helps for students of history. no. 5.) * **SAD**
 See p. 31 for restoration of faded ink.
317. Joly, A. Alkalische Tinten. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 12, 1879, p. 209.) **PKA**
 Refers to his Belgian patent 42374 of 1878.
318. Jones, George D. Typographic printing inks. (British printer, London, v. 31, 1918-19, p. 233-234.) †* **IPA**
 Making ink by hand. Printing papers. Tint inks. Printing on parchment and linen.
319. Joyce, C. M. Chemical control of the process for de-inking paper. (Chemical & metallurgical engineering, New York, v. 25, 1921, p. 242.) **VOA**
320. Julien, Stanislas. Procédés des Chinois pour la fabrication de l'encre. (Annales de chimie et de physique, Paris, tome 53, 1833, p. 308-314.) **PAA**
321. Kampmann, K. Photolithographic ink containing gum Elemi. (Society of Chemical Industry. Journal, London, v. 9, 1890, p. 413.) **VOA**
322. Kappa, pseud. Printers' coloured inks. (English mechanic & world of science, London, v. 102, 1915, p. 166.) **VA**
 Brief description of manufacture.
323. Kassner, G. Alte Tinte. (Jahres Bericht über die Leistungen der chemischen Technologie für 1908, Leipzig, N. F. Jahrg. 39, Abt. 2, p. 495.) **VOA**
 Brief account of ink well and contents found in a Roman camp in Westphalia.
324. Keating, E. M. The relations of paper, type and ink. illus. (Inland printer, Chicago, v. 50, 1913, p. 683-687.) †* **IPA**
 Interesting photomicrographs of the printed letter.
325. Kedesdy, Erich. Tinte und Tintenprüfung. (Papier Zeitung, Berlin, Jahrg. 33, 1908, p. 2263-2264, 2297-2298, 2333.) †† 3 - **VMA**
 Abstract in the *Analyst*, London, v. 33, 1908, p. 367-368, PKA; *Chemical abstracts*, Easton, Penn., v. 2, 1908, p. 3252-3253, PKA.

326. — Über den Nachweis von Gerb- und Gallussäure mittels Molybdänsäurelösung. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 25, 1907, p. 268–269.)

VA

Untersuchungen über Eisengallustinten. Mitteilung

S. Abstracts in *Chemical abstracts*, Easton, Penn., v. 2, 1908, p. 1670, *PKA*; *Chemisches Zentralblatt*, Berlin, Folge 5, Jahrg. 12, 1908, p. 991, *PKA*; *Chemical Society. Journal: Abstracts*, London, v. 94, part 2, 1908, p. 642, *PKA*.

— See also **Hinrichsen**, Friedrich Willy, and **ERICH KEDESZY**.

327. Keenan, Thomas J. How waste paper is treated to make new paper. An account of processes and difficulties to be overcome in removing printer's ink. illus. (*Scientific American*, New York, v. 115, 1916, p. 574–575.)

VA

328. Keghel, Maurice de. Les encres d'imprimerie et leur fabrication. (*Revue de chimie industrielle*, Paris, tome 31, 1922, p. 45–54, 111–117, 143–147, 174–176, 232–235, 259–265, 315–320, 339–345.)

VOA

329. Kempf, Richard. Selbsttätige Vorrichtung zum Ausziehen von Eisengallustinten mit Essigester. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 31, 1913, p. 451–455.)

VA

Untersuchungen über Eisengallustinten. Mitteilung

12. Abstract in *Society of Chemical Industry. Journal*, London, v. 33, 1914, p. 306, *VOA*; *Chemical abstracts*, Easton, Penn., v. 8, 1914, p. 2069, *PKA*.

330. — Über die gewichtanalytische Bestimmung der Gerb- und Gallussäure. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 33, 1915, p. 241–270; Jahrg. 34, 1916, p. 380–386; Jahrg. 35, 1917, p. 47–52.)

VA

Untersuchungen über Eisengallustinten. Mitteilung

14–16. Abstracts in *Chemical abstracts*, Easton, Penn., v. 11, 1917, p. 1755, *PKA*; *Chemisches Zentralblatt*, Berlin, Folge 5, Jahrg. 20, Th. 1, 1916, p. 1279, *PKA*.

— See also **Hinrichsen**, Friedrich Willy, and **RICHARD KEMPF**.

331. Klaproth, Martin Heinrich, and **F. Wolff**. *Dictionnaire de chimie*. Traduit de l'allemand, avec des notes, par E. J. B. Bouillon-Lagrange et par H. A. Vogel. Paris: Klostermann, 1810–11. 4 v. 8°.

PKF

See tome 2, p. 282–288 for writing, Chinese, and sympathetic inks.

332. Knapp. Ueber die sogen. Chromtinte und deren Bereitung. (*Dingler's polytechnisches Journal*, Stuttgart, Bd. 296, 1895, p. 188–189.)

3–VA

See also *Society of Chemical Industry. Journal*, London, v. 14, 1895, p. 799, *VOA*.

333. Knecht, Edmund, and **J. B. FOTHERGILL**. *The principles and practice of textile printing*. London: C. Griffin & Co., Ltd., 1912. xvi, 615 p., 3 plans, 10 pl. illus. 8°. **VLG**

334. Koehler, Hippolyt. *Die Fabrikation des Russes und der Schwärze aus Abfällen und Nebenprodukten, mit besonderer Berücksichtigung der Entfärbungskohle*. Braunschweig: Friedr. Vieweg & Sohn, 1912. viii, 228 p. 3. ed. illus. 4°. (Neues Handbuch der chemischen Technologie; zugleich als dritte Folge von Bolley's Handbuch der chemischen Technologie. [Bd., 5.]

VOE

335. Koppe, Siegfried Walter. *Das Glycerin*. Seine Darstellung, Anwendung und Ermittlung, für Chemiker, Parfümeure, Seifenfabrikanten, Apotheker, Sprengtechniker und Industrielle. Wien und Leipzig: A. Hartleben, 1913. vii, 196 p. 2. ed. 12°. (A. Hartleben's chemisch-technische Bibliothek.)

VOF

See chapter 12: Das Glycerin in der Tintenfabrikation. Recipes for hectograph and copying inks.

336. Kostanecki, St. von. Ueber nitrosirte Resorcinazofarbstoffe. (*Deutsche chemische Gesellschaft. Berichte*, Berlin, Jahrg. 21, 1888, p. 3109–3114.)

PKA

337. — Zur Kenntniss der beizenfärbenden Farbstoffe. (*Deutsche chemische Gesellschaft. Berichte*, Berlin, Jahrg. 20, 1887, p. 3146–3149; Jahrg. 22, 1889, p. 1347–1353.)

PKA

— See also **Liebermann**, C., and **Sr. von Kostanecki**.

338. Kostanecki, St. von, and **St. NIEMEN-TOWSKI**. Ueber die isomeren Dioxymethylanthrachinone. (*Deutsche chemische Gesellschaft. Berichte*, Berlin, Jahrg. 18, 1885, p. 2138–2141.)

PKA

339. Kreis, H. Gerbextrakte. (*Chemiker-Zeitung*, Cöthen, Bd. 30, 1906, p. 768.)

†† **VOA**

340. Kressler, Carl. Anfertigung einer schönen rothen Tinte. (*Polytechnisches Notizblatt*, Mainz, Bd. 4, 1849, p. 106–107.)

VA

341. Kressler, E. Reinigung des Krapplacks zur Herstellung einer möglichst lasirenden Farbe zur feineren Oelmalerei, nebst Anfertigung einer rothen Krapptinte. (*Polytechnisches Notizblatt*, Mainz, Jahrg. 1, 1846, p. 203–204.)

VA

342. Kuehn, Curt. Über den Wert der Zählung feinkörniger Substanzen. (*Zeitschrift für angewandte Chemie*, Leipzig, Jahrg. 15, Theil 1, p. 126–128.)

PKA

Adapts the physiological method of counting blood corpuscles to the examination of finely powdered pigments.

343. Kunz-Krause. Über die Farben- und Fällungsreaktionen der Tannoide und deren Abhängigkeit von der Natur, bezw. Konstitution des einen, bezw. der beiden Reaktionskomponenten. (*Chemisches Centralblatt*, Berlin, Folge 5, Jahrg. 2, Theil 2, 1898, p. 945–946.)

PKA

344. **Lange, Otto.** Chemisch-technische Vorschriften... Leipzig: Otto Spamer, 1923-24. 4 v. 3. ed. 4°. **VO**
Bd. 3, p. 212-233 has an excellent annotated bibliography of processes covering a large variety of inks.
345. **Langer, Alfons.** Die Herstellung von Tusch- und Stempelfarben. (Chemiker-Zeitung, Cöthen, Jahrg. 44, 1920, p. 951-952.) **VOA**
General discussion of usual methods.
346. **Lavay, Jerome Buell.** Disputed handwriting; an exhaustive, valuable, and comprehensive work upon one of the most important subjects of to-day. With illustrations and expositions for the detection and study of forgery by handwriting of all kinds. Chicago: Harvard Book Co. [cop. 1909.] xvi, 304 p. illus. 8°. ***ICL**
See chapters 13 and 14.
347. **Lederlin, P.** Blanchiment, teinture, impression, apprêts. Paris: J. B. Baillière et fils, 1923. 543 p. illus. 8°. (Encyclopédie de chimie industrielle.) **VLG**
348. **Lehner, Sigmund.** Die Tinten-Fabrikation. Darstellung der Anfertigung aller Tinten, der Tusche, Tintenstifte, lithographischen Stifte und Tinten, unauslöschlicher Tinten zum Zeichnen der Wäsche, der Hektographenmassen, der Farben für Schreibmaschinen usf., des Waschblaus und der Stempeldruckfarben. 7. ed. rev. & enl. Wien: A. Hartleben, 1922. xii, 224 p. illus. 12°. (Chemisch-technische Bibliothek. Bd. 17.) **VOBP**
Library also has 3. ed., 1885, and 4. ed., 1890.
349. **Leicester, Sheldon.** Practical studies for paper manufacturers and all engaged in the industry, being a handbook based on lectures given to students, apprentices, artisans in paper works and others, having special reference to the manufacture of paper and its uses by printers, lithographers, ink manufacturers, stationers, publishers and others handling paper. London: Charles Griffin & Co., Ltd., 1924. viii, 363 p. illus. 8°. **VMP**
See index for adaptability of inks to various kinds of paper. See p. 290-293 for testing resistance of paper to ink.
350. **Leidié, E.** Untersuchung einer alten Tinte. (Chemisches Central-Blatt, Berlin, Folge 5, Jahrg. 6, [Teil] 1, p. 383.) **PKA**
Investigation of black substance found in Roman city of Vertillum. Abstract only.
351. **Lemaire, Eugène.** La restauration des parchemins altérés par le feu. illus. (La nature, Paris, tome 36, 1908, p. 87-92.) **OA**
Also in *Scientific American supplement*, New York, v. 66, Sept. 26, 1908, p. 205-206, *VA*.
352. **Lémery, Louis.** Éclaircissement sur la composition des différentes espèces de vitriols naturels, & explication physique & sensible de la manière dont se forment les ancrs vitrioliques. (Académie royale des sciences. Mémoires, Paris, année 1707, p. 538-549.) ***EO**
353. **Lenz, W.** Zur Prüfung der Tinten. (Zeitschrift für analytische Chemie, Wiesbaden, Jahrg. 31, 1892, p. 116-120.) **PKA**
See also Society of Chemical Industry. *Journal*, London, v. 11, 1892, p. 273, *VOA*.
Abstract from *Die Eisengallustinten*, by Schluttig and Neumann.
354. **Leonhardi, August.** Bereitung der Alizarin-Tinte. (Dingler's polytechnisches Journal, Stuttgart, Bd. 142, 1856, p. 141-142.) **3-VA**
Description of his patent. See also *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 11, 1857, p. 478, *VA*.
355. **Lewis, William.** Commercium philosophico-technicum; or, The philosophical commerce of arts: designed as an attempt to improve arts, trades, and manufactures. London: H. Baldwin, 1763. 2 p.l., xviii, x, 646 p., 7 l. illus. 4°. **V (Room 120)**
See p. 339-401 for soot blacks, iron and gall, recipes for writing inks, printing ink, experiments to secure durability of writing and printing inks. A noteworthy work.
356. **Liebermann, C.** Zur Theorie der Beizenfarbstoffe. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 41, 1908, p. 1436-1444.) **PKA**
357. — Zur Theorie der Beizfärbungen. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 26, 1893, p. 1574-1578.) **PKA**
358. **Liebermann, C., and St. von KOSTANECKI.** Ueber einige von der Stellung bedingte Reactionen. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 18, 1885, p. 2142-2149.) **PKA**
359. **Liebermann, C., and W. WENSE.** Zur Kenntniss der färbenden Oxyanthrachinone. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 20, 1887, p. 862-866.) **PKA**
360. **Liebig, Justus.** Ueber die Zusammensetzung der Gerbesäure und der Gallussäuren. (Journal für praktische Chemie, Leipzig, Bd. 2, 1834, p. 321-327.) **PKA**
361. **Link.** Vorschrift zu einer tiefschwarzen neutralen Tinte. (Dingler's polytechnisches Journal, Augsburg, Bd. 168, Jahrg. 1863, p. 468.) **3-VA**
362. **Lippmann, Edmund Oskar von.** Entstehung und Ausbreitung der Alchemie; mit einem Anhang: Zur älteren Geschichte der Metalle... Berlin: Julius Springer, 1919. xvi, 742 p. 4°. **PKD**
References to ancient and mediaeval inks. See index.
363. **Lloyd, Stewart J.** Preliminary note on the constitution of gallotannic acid and of tannins in general. (Chemical news, London, v. 97, March 20, 1908, p. 133.) **PKA**
364. **Loeffl.** Entfernen der Druckerschwärze von Zeitungspapier. (Chemiker-Zeitung, Cöthen, Jahrg. 45, 1921, p. 986.) **VOA**

365. **Loewe, Julius.** Ueber Sumachgerbsäure. (*Zeitschrift für analytische Chemie*, Wiesbaden, Jahrg. 12, 1873, p. 128-136.)

PKA

366. — Ueber die Umwandlung der Gallussäure in Gerbsäure. (*Journal für praktische Chemie*, Leipzig, Bd. 102, 1867, p. 111-120.)

PKA

Lorenz, Fritz, joint author. See **Specht**, Leopold, and **Fritz Lorenz**.

367. **Lovibond, Joseph W.** On the fading of inks and pigments. illus. (*Society of Chemical Industry. Journal*, London, v. 24, 1905, p. 262-265.)

VOA

368. **Lucas.** Ueber Hervorbringung einer unzerstörbaren Schrift. (*Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 17, 1863, p. 1517.)

VA

369. **Lucas, Alfred.** Forensic chemistry. London: Edward Arnold & Co., 1921. vii, 268 p. tables. 8°.

PPL

See chapter 6, p. 74-123, on documents. Bibliography.

370. — The inks of ancient and modern Egypt. (*Analyst*, Cambridge, England, v. 47, 1922, p. 9-15.)

PKA

371. — Legal chemistry and scientific criminal investigation. London: Edward Arnold, 1920. viii, 181(1) p., 1 l. tables. 8°.

PPL

See p. 65-102.

372. **Luminous printing ink.** (Inland printer, Chicago, v. 39, 1907, p. 738.)

†* IPA

373. **Lumpy ink.** (Inland printer, Chicago, v. 45, 1910, p. 247.)

†* IPA

374. **Lunéville, C. Marchal de.** Technologie de la Chine. illus. (*L'Illustration*, Paris, tome 25, 1855, p. 37-38.)

* DM

Illustration shows manufacture of Chinese ink.

Luther, R., joint author. See **Ostwald**, Wilhelm, and **R. Luther**.

375. **M., D. Runge's Chromtinte.** Von W. Stein in Dresden. (*Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 3, 1849, p. 1471.)

VA

Also in *Dingler's polytechnisches Journal*, Stuttgart, Bd. 115, 1850, p. 77, 3-VA.

376. **McConnell, William J.** Industrial dermatosis among printers. (United States. — Public Health Service. Public health reports, Washington, v. 36, 1921, p. 979-989.)

SPB

Ink poisoning which affects the hands and arms of printers who work constantly with colored inks.

377. **MacKellar, Thomas.** The American printer: a manual of typography... Philadelphia: MacKellar, Smiths & Jordan, 1885. 1 p.l., iii-xiv, 13-384 p. [15. ed.] illus. 12°.

* IPR

Treats briefly of colored inks and color harmony.

378. **Maddox, Harry A.** Effect of chemical residues in paper upon printing inks. (*Chemical abstracts*, Easton, Penn., v. 7, 1913, p. 1415.)

PKA

379. **Mairet, F.** Notice sur la lithographie suivie d'un essai sur la reliure et le blanchiment des livres et gravures. Châtillon-sur-Seine: C. Cornillac, 1824. 228 p., 4 pl. 12°.

MDP

See p. 20-24.

380. **Management of inks.** (Inland printer, Chicago, v. 4, 1886-87, p. 109, 286.)

†* IPA

381. **Manea, A.** Methode zur Ermittlung der Gallusgerbsäuren in den Gerbstoffmaterialien. (*Chemisches Centralblatt*, Berlin, Folge 5, Jahrg. 10, Theil 1, 1906, p. 406.)

PKA

382. **Mangold, Christian.** India ink — how it is made. (*Scientific American supplement*, New York, v. 54, 1902, p. 22202-22203.)

VA

383. **Manoylov, E. O.** Bacteria in writing inks. (*Chemical abstracts*, Easton, Penn., v. 7, 1913, p. 3141.)

PKA

384. **The Manufacture of India ink.** (*Scientific American supplement*, New York, v. 58, 1904, p. 24187.)

VA

385. **Manufacture of marking ink in Mexico.** (*Society of Chemical Industry. Journal*, London, v. 23, 1904, p. 771.)

VOA

Use of the pulp of the *Eseleloahnitl* tree.

386. **The Manufacture of printing ink.** A brief note for students at trade classes. (British printer, London, v. 28, 1915-16, p. 229.)

†* IPA

387. **Many inks are becoming costly.** (British printer, London, v. 28, 1915-16, p. 195.)

†* IPA

Effect of war on prices.

388. **Marcusson, J.** Die technischen Cumaronharze. (*Chemiker-Zeitung*, Cöthen, Jahrg. 43, 1919, p. 93-94, 109-111, 122-123.)

VOA

Abstract in *Chemical abstracts*, Easton, Penn., v. 13, 1919, p. 2607-2608, PKA.

Used in making certain types of very satisfactory printing inks.

389. **Margival, François.** Les encres. Paris: Gauthier-Villars [1912]. 162 p. 12°. (*Encyclopédie scientifique des aide-mémoire*.)

VOPB

390. **Marking ink.** (American Pharmaceutical Association. Proceedings, Philadelphia, v. 17, 1869, p. 161.)

WTA

391. **Marking ink with base of aniline hydrochlorate.** (*Scientific American supplement*, New York, v. 63, 1907, p. 26092.)

VA

Three formulas.

392. **Marr, Robert A.** Waste paper recovery process. (Paper, New York, v. 29, no. 15, p. 28-29.)

VMPA

Account of his U. S. patent 1396227 of 1921.

393. **Marre, Francis.** Restoring books and papers injured by fire. (Scientific American supplement, New York, Sept. 14, 1918, p. 165.) **VA**
394. **Martell, Paul.** Einige Beiträge zur Geschichte der Tinte. (Zeitschrift für angewandte Chemie, Leipzig, Jahrg. 26, Aufsatzteil, 1913, p. 197-199.) **PKA**
References to ancient and mediæval writings.
395. **Martin, Geoffrey.** Industrial and manufacturing chemistry. Part 1. Organic. London: Crosby Lockwood & Son, 1918. xx, 744 p. 4. ed. rev. & enl. illus. 4°. **VOE**
See chapter entitled: The ink industry, p. 489-494.
396. **Mason, Claude D.** Ordinary writing fluid for marking porcelain crucibles. (Journal of industrial and engineering chemistry, Easton, Penn., v. 4, 1912, p. 691.) **VOA**
397. **May, Joseph O.** "Doping" inks. (Inland printer, Chicago, v. 57, 1916, p. 763-764.) **†* IPA**
398. — The printer and the inkman. (Inland printer, Chicago, v. 60, 1917, p. 331-332.) **†* IPA**
399. **Meadowcroft, W.** Common or "news" ink. (British printer, London, v. 33, 1920, p. 76.) **†* IPA**
Rough methods of judging quality.
400. **Mecklenburg, Werner.** Über einige physikalische Eigenschaften der Tinten. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 35, 1917, p. 214-234.) **VA**
Abstracts in *Chemical abstracts*, Easton, Penn., v. 14, 1920, p. 130, **PKA**; *Chemisches Zentralblatt*, Berlin, Folge 5, Jahrg. 22, Theil 2, p. 160, **PKA**.
Seven commercial inks were examined to determine their specific weights, fineness of pulverization, and covering power. Results were compared with behavior of inks when used.
401. — Über die Schwärze von Tintenflecken auf Papier. illus. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 34, 1916, p. 387-435; Jahrg. 35, 1917, p. 134-159; Jahrg. 38, 1920, p. 35-62.) **VA**
See Society of Chemical Industry. *Journal*, London, v. 40, 1921, p. 708A, **VOA**; *Zeitschrift für Elektrochemie*, Leipzig, v. 22, 1916, p. 23-27; *Chemical abstracts*, Easton, Penn., v. 16, 1922, p. 3004, **PKA**.
— See also **Bauer, O.**, and **WERNER MECKLENBURG**.
402. **Mees, Charles Edward Kenneth.** Tricolor printing inks. (Knowledge, London, new series, v. 8, 1911, p. 323.) **OA**
403. **Melcher, Webster Adam.** Light and color phenomena. A new study based on an original investigation and its results. (Textile colorist, New York, v. 45, 1923, p. 219-222.) **VLA**
Experiments with the aging of writing in daylight, yellow, red and blue light, and in the dark.
404. — Mechanical ink marks; a study of mechanograms, as means of identifying marks made by mechanical appliances, and detecting imitations thereof. Philadelphia: the author, 1914. 27 p. 8°. **VOD p.v. 14, no. 10**
405. **Merget.** Darstellung einer Tinte zum Zeichnen und Schreiben auf Papier, Wäsche, Holz, etc. (Chemisches Centralblatt, Leipzig, Folge 3, Jahrg. 3, 1872, p. 444.) **PKA**
406. **Metz, H. A.** Aniline colours and their relation to printing ink pigments. (British printer, London, v. 30, 1917, p. 155-156.) **†* IPA**
407. **Michaelis, Hugo.** Entfernen der Druckerschwärze von Zeitungspapier. (Chemiker-Zeitung, Cöthen, Jahrg. 45, 1921, p. 1118.) **VOA**
Quotes Goethe in relation to this subject.
408. **Milham, E. G.** Handling of old paper stock. Operations involved in making half-stuff from graded waste papers. (Paper, New York, v. 30, no. 15, 1922, p. 7-10.) **VMPA**
409. **Miller, Alfred J.** Removing ink stains from stucco and concrete. (Concrete, Detroit, v. 11, 1917, p. 123.) **VEA**
410. **Miller, C. T.** Help the ink maker to help you. (British printer, London, v. 35, 1922, p. 22.) **†* IPA**
411. **Mitchell, Charles Ainsworth.** The acidity of ink and the influence of bottle glass upon ink. (Analyst, London, v. 46, 1921, p. 129-135.) **PKA**
Abstract in Society of Chemical Industry. *Journal*, London, v. 40, 1921, p. 356a-357a, **VOA**.
412. — The chemistry of inks in hand-writing. illus. (Knowledge, London, new series, v. 7, 1910, p. 387-390.) **OA**
Also printed in *Scientific American supplement*, New York, v. 71, 1911, p. 302-303, **VA**.
413. — Colloids in relation to the manufacture of inks. (British Association for the Advancement of Science. Fifth report on colloid chemistry, London, 1923, p. 47-50.) **PLD**
With brief bibliography.
414. — Copying-ink pencils and the examination of their pigments in writing. (Analyst, London, v. 42, 1917, p. 3-11.) **PKA**
Has analyses of pigments of twenty-one pencils.
415. — Documents and their scientific examination; with especial reference to the chemistry involved in cases of suspected forgery, investigation of disputed documents, handwriting, etc. London: Charles Griffin & Co., Ltd., 1922. xii, 215 p. illus. 12°. (Griffin's scientific text-books.) **PPL**

416. — English inks: their composition and differentiation in handwriting. (Analyst, London, v. 33, 1908, p. 80-85.)

PKA

Has a table showing reactions given by samples of commercial inks.

See also Society of Chemical Industry. *Journal*, London, v. 27, 1908, p. 327-328, *VOA*; *Chemical abstracts*, Easton, Penn., v. 2, 1908, p. 1888, *PKA*.

417. — Estimation of the age of ink in writing. (Analyst, London, 1920, v. 45, p. 247-258.)

PKA

Abstract in Society of Chemical Industry. *Journal*, London, v. 39, 1920, p. 577A, *VOA*; *Chemical abstracts*, Easton, Penn., v. 14, 1920, p. 2899-2900, *PKA*.

418. — The examination of handwriting. (Knowledge, London, new series, v. 4, 1907, p. 147-148.)

OA

419. — Ink. London: Sir Isaac Pitman & Sons, Ltd. [1923.] ix, 128 p. illus. 12°. (Pitman's common commodities and industries.)

VOPB

General work, with chapters on testing and permanency.

420. — Inks. (Royal Society of Arts. *Journal*, London, v. 70, 1922, p. 647-660.)

VA

Cantor lectures. Much of historical interest.

Also printed in *Color trade journal*, New York, v. 11, 1922, p. 160-162, 212-214; v. 12, 1923, p. 23-26, 84-86, *VOA*.

Abstract in Society of Chemical Industry. *Journal*, London, v. 41, 1922, p. 93R-94R, *VOA*.

421. Mitchell, Charles Ainsworth, and T. C. HEPWORTH. Inks; their composition and manufacture, including methods of examination and a full list of English patents. London: Charles Griffin & Co., 1916. xvi, 266 p., 3 facsimis., 1 pl. 2. ed. rev. illus. 8°.

VOPB

Much of historical interest. Numerous references.

422. The **Mixing** of inks. (Inland printer, Chicago, v. 50, 1913, p. 737-738.)

†* IPA

General article with suggested books.

423. **Mixing** inks to work in cold weather. (Inland printer, Chicago, v. 32, 1903, p. 256.)

†* IPA

424. The **Mixing** and matching of colours. The ink maker's point of view. (British printer, London, v. 31, 1918, p. 24.)

†* IPA

425. Moigno, F. Native vegetable ink. (Chemical news, London, v. 26, 1872, no. 659, p. 23.)

PKA

Brief reference to ink-plant of New Granada.

426. Monton, Bernardo. Secretos de artes liberales, y mecanicas, recopilados, y traducidos de varios, y selectos authores, que tratan de phisica, pintura, arquitectura, optica, chimica, doradura, y charoles, con otras varias curiosidades ingeniosas. Madrid: Antonio Marin, 1734. 10 p.l., 140 p., 23 pl. 8°.

VBA

Has a few recipes.

427. Moxon, Joseph. Moxon's Mechanick exercises; or, The doctrine of handy-works applied to the art of printing. A literal reprint in two volumes of the first edition published in the year 1683. With preface and notes by Theo. L. De Vinne. New York: The Typothetæ of the City of New York, 1896. 2 v. 4°.

* IPS

See v. 1, p. 75-80 for process of making printers' ink, with comparisons of Dutch and English practices.

428. Mozard. Par brevets d'invention; nouvelles découvertes; papier de sureté, destiné à prévenir toute espèce de faux en écritures publiques ou privées et encre chimico-specimut, propre aux timbres et à l'impression des effets de commerce et de banque. [Par Mozard.] Paris: Ve. Delaguet, 1834. 16 p. 4°.

†* C p.v. 1587, no. 3

429. Mueller, Julius. Bereitung einer guten Stempelfarbe. (Polytechnisches Notizblatt, Mainz, Jahrg. 29, 1874, p. 48.)

VA

430. Mueller, M. Herstellung von Glastinte. (Dinglers polytechnisches Journal, Stuttgart, Bd. 250, 1883, p. 555-556.)

3-VA

See also Chemical Society. *Journal: Abstracts*, London, v. 46, 1884, p. 880, *PKA*.

431. Munson, L. S. The examination of writing inks. folded table. (American Chemical Society. *Journal*, v. 28, April, 1906, p. 512-516.)

PKA

Author connected with United States Bureau of Chemistry. Tables give details of tests on thirty brands of ink.

Abstract in Chemical Society. *Journal: Abstracts*, London, v. 90, part 2, p. 405, *PKA*.

432. The **Mystery** of India ink. (Harper's weekly, New York, v. 54, 1910, p. 33.)

* DA

433. Nagawo, K. Leucocytosis produced by the injection of India ink emulsion. (Chemical abstracts, Easton, Penn., v. 16, 1922, p. 3701.)

PKA

Abstract from *Japan medical world*.

434. Naquet, Alfred Joseph. Legal chemistry. A guide to the detection of poisons, examination of stains, etc. as applied to chemical jurisprudence. Translated with additions from the French by J. B. Battershall... New York: D. Van Nostrand, 1876. 2 p.l., 178 p. illus. 12°.

PPL

See p. 105-110.

435. Nasse, O. Eine neue Pyrogallol-Reaktion. (Deutsche chemische Gesellschaft. Berichte, Berlin, Bd. 17, 1884, p. 1166.)

PKA

436. **Natural** ink. (Every Saturday, Boston, new series, v. 2, 1871, p. 463.)

* DA

Use of "chanchi" juice from New Granada.

437. Nernst, Walther. Die elektromotorische Wirksamkeit der Ionen. (Zeitschrift für physikalische Chemie, Leipzig, Bd. 4, 1889, p. 129-181.)

PKA

438. — Zur Kinetik der in Lösung befindlichen Körper. (Zeitschrift für physikalische Chemie, Leipzig, Bd. 2, 1888, p. 613–637.)

PKA

439. Neumann, G. S., and OSWALD SCHLUTTING. Tinte. (In: Muspratt's Theoretische, praktische und analytische Chemie, in Anwendung auf Künste und Gewerbe. Braunschweig, 1905. 4. ed. 4°. Bd. 8, p. 1274–1406.)

PKF

Unusually comprehensive account of history, raw materials, and chemistry, with a large number of formulas.

— See also Schluttig, Oswald, and G. S. NEUMANN.

440. A New ink. (Cornell chemist, Ithaca, N. Y., v. 13, Feb., 1924, p. 24.)

PKA

Ink for protecting checks. Invention of Professor W. R. Orndorff.

441. A New ink. (Inland printer, Chicago, v. 8, 1890, p. 179.)

†* IPA

Use of bitumen.

442. New printing ink dyes. (British printer, Leicester, v. 30, 1917–18, no. 179, p. 196.)

†* IPA

443. New transfer ink. (Scientific American supplement, New York, v. 56, 1903, p. 23348–23349.)

VA

444. Nickeltypes for red ink. (Inland printer, Chicago, v. 42, 1909, p. 577.)

†* IPA

Niementowski, St., joint author. See Kostanecki, St. von, and St. NIEMENTOWSKI.

445. Nierenstein, M. Über das Färbenvermögen der Gerbstoffe. (Chemiker-Zeitung, Cöthen, Jahrg. 30, Semestre 2, 1906, p. 1101–1102.)

†† VOA

446. — Über das Tannin. (Chemiker-Zeitung, Cöthen, Jahrg. 31, 1907, p. 880.)

†† VOA

447. — Zur Constitutionsfrage des Tannins. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 38, 1905, p. 3641–3642; Jahrg. 40, 1907, p. 916–918; Jahrg. 41, 1908, p. 77–80, 3015–3019; Jahrg. 42, 1909, p. 1122–1126, 3552–3553; Jahrg. 43, 1910, p. 628–634.)

PKA

448. — Zur qualitativen Analyse der Gerbstoffe. (Chemiker-Zeitung, Cöthen, Bd. 30, 1906, p. 868.)

†† VOA

449. Noah, E. Synthese des Xanthopurpurins und Purpurins. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 19, 1886, p. 332–334.)

PKA

450. — Ueber Pentaoxyanthrachinon und Anthrachryson. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 19, 1886, p. 751–755.)

PKA

451. — Ueber zwei neue Tetraoxyanthrachinone. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 19, 1886, p. 2337–2340.)

PKA

452. O., G. E. Removing ink stains. (British journal of photography, London, v. 59, Aug. 30, 1912, p. 680–681.)

MFA

453. Obstinate ink. (Inland printer, Chicago, v. 23, 1899, p. 74.)

†* IPA

Suggestions for overcoming trouble with blue printing ink.

Oesterreicher, A., joint author. See Habermann, J., and A. OESTERREICHER.

454. An Official ink. (Scientific American supplement, New York, v. 49, 1900, p. 20325.)

VA

Law passed in Massachusetts.

455. Offset ink. (Inland printer, Chicago, v. 47, 1911, p. 253.)

†* IPA

456. Offsetting of process inks. (Inland printer, Chicago, v. 43, 1909, p. 568–569.)

†* IPA

457. Oils used in inkmaking. (Inland printer, Chicago, v. 45, 1910, p. 81.)

†* IPA

458. Osborn, Albert Sherman. Instruments and illustrations in disputed document trials. [New York, 1917?] 4 l. illus. 8°.

* IC p.v. 4, no. 11

459. — The problem of proof, especially as exemplified in disputed document trials; a discussion of various phases of the proof of the facts in a court of law, with some general comments on the conduct of trials ... Introduction by Professor John Henry Wigmore. New York: Matthew Bender & Co., Incorporated, 1922. xxi(i), 526 p. 8°.

XH

See index.

460. — Questioned documents; a study of questioned documents, with an outline of methods by which the facts may be discovered and shown. With an introduction by Professor John H. Wigmore. Rochester, N. Y.: Lawyers' Co-operative Publishing Co., 1910. 2 p.l., vii–xxiv, 501 p., 1 pl. illus. 4°.

* ICL

See index. Describes use of the color microscope.

461. Ost, Hermann. Lehrbuch der chemischen Technologie. Leipzig: Max Jänecke, 1923. viii, 815 p. 13. ed. illus. 8°.

VOE

See p. 678–679 for brief general chapter on writing inks.

462. Ostwald, Wilhelm, and R. LUTHER. Hand- und Hilfsbuch zur Ausführung physiko-chemischer Messungen. Leipzig: W. Engelmann, 1902. xii, 492 p. 2. l. illus. 8°.

PLD

See p. 336 for description of Capillarelektrometer.

463. Ott, A. Vorzügliche Copirtinte. (Dingler's polytechnisches Journal, Augsburg, Jahrg. 1862, Bd. 165, p. 78.)

3–VA

Also in Polytechnisches Centralblatt, Leipzig, N. F. Jahrg. 16, 1862, p. 831, VA; Polytechnisches Notizblatt, Mainz, Jahrg. 17, 1862, p. 240, VA.

Ozorovitz, H. H., joint author. See Silbermann, T., and H. H. OZOROVITZ.

464. Paladino, Raffaele. Über die schwarze Kephelopodentinte. (Biochemische Zeitschrift, Berlin, Bd. 16, 1909, p. 37-44.)

PPB

Abstract in Chemical Society. *Journal: Abstracts*, 1909, part 2, p. 252, PKA.

Black secretion of *Eledone moscata*.

465. The Paper maker and the ink maker. (British printer, London, v. 29, 1916, p. 26.)

†* IPA

Defects in printing more often due to faulty paper.

466. Parker, J. Gordon, and E. E. MUNRO PAYNE. A new method for the analysis of tannin and tanning materials and the identification of admixtures in tanning extracts and liquors. (Society of Chemical Industry. *Journal*, London, v. 23, 1904, p. 648-651.)

VOA

467. Paternó, E. Ueber das Verhalten der Colloidsubstanzen gegen das Raoult'sche Gesetz. (Zeitschrift für physikalische Chemie, Leipzig, Bd. 4, 1889, p. 457-461.)

PKA

Payne, E. E. Munro, joint author. See Parker, J. Gordon, and E. E. MUNRO PAYNE.

468. Payne, Harold J. Use of de-inked stock in production of book paper. Outline of steps followed in the plant of the Newton Falls Paper Co., where the product is softened by the addition of de-inked paper stock to sulphite pulp. (Chemical & metallurgical engineering, New York, v. 29, 1923, p. 1176-1180.)

VOA

469. Peddie, R. A. The history of colour printing. (British printer, London, v. 27, 1914, p. 157-158, 217-218.)

†* IPA

470. Pelouze, J. Mémoire sur le tannin et les acides gallique, pyrogallique, ellagique et métagallique. (Annales de chimie et de physique, Paris, tome 54, 1833, p. 337-365.)

PAA

Also in *Journal für praktische Chemie*, Leipzig, Bd. 2, 1834, p. 301-321, PKA.

471. — Ueber die Zusammensetzung der Gerbesäure. (*Journal für praktische Chemie*, Leipzig, Bd. 2, 1834, p. 318-330.)

PKA

472. Permanence of color in printing inks. (Inland printer, Chicago, v. 47, 1911, p. 729-730.)

†* IPA

473. The Permanence of vermilion. (Inland printer, Chicago, v. 50, 1913, p. 573.)

†* IPA

474. The Permanency of inks. (British printer, London, v. 30, 1917, p. 35.)

†* IPA

475. Philippi, Friedrich. Einführung in die Urkundenlehre des deutschen Mittelalters. Bonn: Kurt Schroeder, 1920. viii, 256 p. 12°. (Bücherei der Kultur und Geschichte. Bd. 3.)

* IC

See p. 47-51.

476. Pictet, Raoul. A new method for obtaining chemically pure oxygen from the

atmosphere, its use for illuminating purposes, and a new method for obtaining pure hydrogen; utilization of the by-products for typographic inks. (Chemical abstracts, Easton, Penn., v. 7, 1913, p. 2667.)

PKA

Abstract only. See also *Chemisches Zentralblatt*, Berlin, Folge 5, Jahrg. 17, Theil 1, 1913, p. 662, PKA.

By-product is lampblack.

477. Pliny, the elder. The natural history of Pliny. Translated with copious notes and illustrations by the late John Bostock and H. T. Riley. London: H. G. Bohn, 1855-57. 6 v. 12°. (Bohn's classical library.)

* R-PQC

See index in v. 6.

478. Porta, Giovanni Battista della. *Magiæ naturalis libri viginti...* Lugd. Batavorum: Apud Hieronymum de Vogel, 1644. 8 p.l., 670 p., 11 l. 24°.

PKD

See liber 16, p. 544-570 for sympathetic ink.

479. — Natural magick by John Baptista Porta, a Neapolitane: in twenty books... wherein are set forth all the riches and delights of the natural sciences. London: Printed for Thomas Young and Samuel Speed, 1658. 2 p.l., 409 p., 2 l. 4°.

PKD

The 16th book, p. 340-354, deals with sympathetic ink.

480. Pottevin, H. Sur la constitution du gallotannin. (Académie des sciences. Comptes rendus, Paris, tome 132, 1901, p. 704-706.)

* EO

481. Powell, Baden Harry Baden. Handbook of the economic products of the Punjab, with a combined index and glossary of technical vernacular words. Roorkee: Thomason Civil Engineering College Press, 1868. 2 v. 8°.

V (Baden)

See v. 1, p. 63 for recipe for lampblack and ink made therefrom.

482. Preisser, O. Aus der Praxis der Druckfarbenfabrikation. (Farben-Zeitung, Berlin, Jahrg. 20, 1915, p. 1087-1088, 1110-1111.)

VOA

General article.

483. Preparation of ink. (American druggists' circular, New York, v. 1, 1857, p. 144.)

†† WTA

Dr. Bly's recipe.

484. Printing on celluloid. (Inland printer, Chicago, v. 42, 1909, p. 577.)

†* IPA

485. Printing with gold ink. (Inland printer, Chicago, v. 27, 1901, p. 214-215.)

†* IPA

486. Printing with gold ink. (Inland printer, Chicago, v. 41, 1908, p. 898.)

†* IPA

487. Printing ink for aluminum. (Inland printer, Chicago, v. 31, 1903, p. 733.)

†* IPA

488. Printing ink for halftone work. (Scientific American supplement, New York, v. 86, 1918, p. 139.)

VA

489. **Printing ink and printing paper.** Technical details relating to the materials of which books are made. (Scientific American supplement, New York, v. 81, 1916, p. 43.) **VA**
490. **Printing ink reducer.** (Inland printer, Chicago, v. 31, 1904, p. 720.) **†* IPA**
491. **Printing ink reducers.** (Inland printer, Chicago, v. 31, 1903, p. 568.) **†* IPA**
492. **The Printing ink trade.** (British printer, London, v. 27, 1914, p. 201.) **†* IPA**
Effect of the war.
493. **Printing on tin.** (Inland printer, Chicago, v. 41, 1908, p. 998.) **†* IPA**
494. **Processes for repulping waste paper.** Inventions for removing printer's ink and producing clean white pulp for new paper. illus. (Paper, New York, Dec. 19, 1917, v. 21, p. 14-16.) **VMPA**
495. **Procter, H. R., and H. G. BENNETT.** An investigation of the barium and calcium salts of gallic, protocatechuic and digallic acids. (Society of Chemical Industry. Journal, London, v. 25, 1906, p. 251-254.) **PKA**
496. **Procter, H. R., and F. A. BLOCKLEY.** The absorption of non-tanning substances by hide powder, and its influence on the estimation of tannin. (Society of Chemical Industry. Journal, London, v. 22, 1903, p. 482-484.) **VOA**
497. **Prussia.** — Königliche Staatsministerium. Grundsätze für amtliche Tintenprüfung. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 32, 1914, p. 1-4.) **VA**
498. **Puscher, C.** Unzerstörbare Tinte. (Polytechnisches Notizblatt, Mainz, Jahrg. 22, 1867, p. 190.) **VA**
See also *Polytechnisches Centralblatt*, Leipzig, Jahrg. 22, 1868, p. 1193, **VA**; American Pharmaceutical Association. *Proceedings*, Philadelphia, no. 18, 1870, p. 213-214, **WTA**.
499. **Quantity of ink required on a given job.** (Inland printer, Chicago, v. 41, 1908, p. 898.) **†* IPA**
500. **Quick drying inks.** (British printer, London, v. 32, 1919, p. 66.) **†* IPA**
501. **Ransom, B. G.** The manufacture of printing ink and the relation of ink properties to printing of all grades. (Pulp & paper magazine of Canada, Gardenvale, Que., v. 21, 1923, p. 129-143.) **VMPA**
Also printed in *Chemical age*, New York, v. 31, 1923, p. 63-67, **PKA**.
502. **Raschig, F.** Die Eisenchloridreaktion des Phenols und die Chlorkalkreaktion des Anilins. (Zeitschrift für angewandte Chemie, Berlin, Jahrg. 20, 1907, p. 2065-2071.) **PKA**
503. **Raucourt, Antoine.** A manual of lithography; clearly explaining the whole art, and the accidents that may happen in printing, with the different methods of avoiding them. Translated from the French by C. Hullmandel. London: Longman, Rees, Orme, Brown, Green, and Longman, 1832. xix, 117 p., 2 pl. 8°. **MDP**
Excellent descriptions of ink preparation.
504. **Reclaim** printed book paper by new process. (Popular mechanics, Chicago, v. 35, 1921, p. 676.) **VFA**
505. **Red inks.** (British printer, London, v. 32, 1919, p. 67.) **†* IPA**
506. **Reducer for ink.** (Inland printer, Chicago, v. 40, 1907, p. 228.) **†* IPA**
507. **A Reducer for new ink.** (Inland printer, Chicago, v. 42, 1909, p. 919.) **†* IPA**
508. **Reducers for inks.** (Inland printer, Chicago, v. 41, 1908, p. 411.) **†* IPA**
509. **Reinige, Wilhelm.** Schwarze Tinte. (Polytechnisches Centralblatt, Leipzig, N. F. Jahrg. 10, 1856, p. 702.) **VA**
510. **Removal of blood and ink stains.** (Color trade journal, New York, 1919, v. 4, p. 62-63.) **VOA**
511. **The Removal of ink from waste paper.** (Scientific American supplement, New York, v. 74, 1912, p. 407.) **VA**
512. **Removing copying ink from rollers.** (Inland printer, Chicago, v. 43, p. 568.) **†* IPA**
513. **Removing Indian ink stains.** (Illustrated carpenter & builder, London, v. 95, 1924, p. 18, 20.) **3-VEA**
Four recipes.
514. **Removing ink.** Process of taking it from printed matter and then pulping the stock. (Paper mill and wood pulp news, New York, v. 38, no. 10, 1915, p. 13.) **†3-VMPA**
Bell-Lape patent.
515. **Renewing faded inks.** (Inland printer, Chicago, v. 3, 1886, p. 720.) **†* IPA**
Method applied to parchments.
516. **Rhodes, Henry J.** The art of lithography; a complete practical manual of planographic printing. London: Scott, Greenwood & Son, 1914. 2 p.l., vii-xv, 327 p., 2 plans, 1 port. 8°. **MDP**
Excellent chapter on inks.
517. — — — London: Scott, Greenwood & Son, 1924. 328 p. 2. rev. ed. illus. 8°.
518. **Ribaucourt.** Dissertation sur l'encre ordinaire à écrire. (Annales de chimie, Paris, tome 15, 1792, p. 113-160.) **PAA**
Unusually complete exposition for the time when it was written.
519. **Ridenour, W. E.** Catechu. (Franklin Institute. Journal, Philadelphia, v. 56, 1903, p. 417-424.) **VA**

520. Robertson, A., and J. HOFMANN. The chemical examination of hand-writing. (Society of Chemical Industry. Journal, London, v. 11, 1892, p. 847.) **VOA**
Method consists in drawing a goose feather, dipped in the tabulated reagents, over the letters, etc., composing the writing, and observing the alterations produced under a power of 100 diameters.
521. Roder, F. Blaue Tinte zum Zeichnen der Wäsche. (Polytechnisches Notizblatt, Mainz, Jahrg. 11, 1856, p. 112.) **VA**
522. Rosenheim, Otto. The methylation of gallotannic acid. (Chemical Society. Proceedings, London, 1905, v. 21, p. 157-158.) **PKA**
523. Rosenheim, Otto, and PHILIP SCHIDROWITZ. The influences modifying the specific rotatory power of gallotannic acid. (Chemical Society. Journal, London, v. 73, 1898, p. 885-893.) **PKA**
524. ——— The optical activity of gallotannic acid. (Chemical Society. Journal, London, v. 73, 1898, p. 878-885.) **PKA**
For a note stating that van Tieghem discovered the optical activity of the acid see Chemical Society. Proceedings, London, v. 15, 1900, p. 67.
525. Rothe, J., and F. W. HINRICHSSEN. Über die Bestimmung des Eisens in der Tinte. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 24, 1906, p. 285-286.) **VA**
Untersuchungen über Eisengallustinten. Mitteilung 3.
526. ——— Über die Bestimmung von Gerb- und Gallussäure. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 24, 1906, p. 280-284.) **VA**
Untersuchungen über Eisengallustinten. Mitteilung 2.
527. ——— Über die Haltbarkeit von Tinte im Glase. (Prussia. — Materialprüfungsamt. Mitteilungen, Berlin, Jahrg. 24, 1906, p. 278-279.) **VA**
Untersuchungen über Eisengallustinten. Mitteilung 1.
528. Rothwell, C. F. Seymour. The printing of textile fabrics, a practical manual on the printing of cotton, woollen, silk and half-silk fabrics. London: C. Griffin & Co., Ltd., 1897. xi, 312 p. illus. 8°. **VLG**
529. Rowley, A. J. The manufacture of colours for printing inks. (British printer, London, v. 28, 1915-16, p. 217-218.) **†* IPA**
530. Ruebencamp, Robert. Papier und Druckfarbe. (Farben-Zeitung, Berlin, Jahrg. 28, 1923, p. 1389-1390.) **VOA**
Discusses effect of printing inks on color and durability of paper.
531. ——— Papier und Schwärze vom technischen Standpunkte. (In: H. Cohn, and R. Ruebencamp, Wie sollen Bücher und Zeitungen gedruckt werden. Braunschweig, 1903. 8°. p. 78-97.) *** IPR**
Briefly describes manufacture of lamblack.
532. Ruhr. Zeichentinte für Wäsche. (Polytechnisches Notizblatt, Mainz, Jahrg. 22, 1867, p. 224.) **VA**
See also *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 21, 1867, p. 1150, *VA*; *Dingler's polytechnisches Journal*, Augsburg, Bd. 185, 1867, p. 326, 3-*VA*.
533. Runge, Friedlieb Ferdinand. Grundriss der Chemie. München: Georg Franz, 1846-47. 2 v. 8°. **PKL**
See Bd. 2, p. 205-209 for formulae; also for author's use of his inks with steel pen. See also *Dingler's polytechnisches Journal*, Augsburg, Bd. 109, 1848, p. 225-228, 3-*VA*.
534. Ruoss. Die quantitative Bestimmung der Gerbsäure durch Ferrisalze. (Zeitschrift für analytische Chemie, Wiesbaden, Jahrg. 41, 1902, p. 716-734.) **PKA**
535. Rupert, Frank F. Examination of writing inks. illus. (Industrial and engineering chemistry, Easton, Pa., v. 15, 1923, p. 489-493.) **VOA**
Abstract in Society of Chemical Industry. Journal, London, v. 42, 1923, p. 612A, *VOA*; *Analyst*, Cambridge, England, v. 48, 1923, p. 459-461, *PKA*.
536. ——— Manufacture and properties of writing inks. (Chemical age, New York, v. 30, 1922, p. 345-348.) **VOA**
537. Ruxton, Philip. Printing inks; their composition, properties and manufacture, reprinted by permission from Circular no. 53 United States Bureau of Standards. Together with some helpful suggestions about the every-day use of printing inks. (Chicago:) Published by the Committee on Education, United Typothetae of America, 1918. 71 p. 8°. (Typographic technical series for apprentices. part 1, no. 12.) *** IPB (Typographic)**
538. S., D. Indelible laundry inks. (Druggists circular, New York, v. 62, 1918, p. 169.) **† WTA**
Recipes.
539. S., O. Some characteristics of offset printing inks. (British printer, London, v. 34, 1922, p. 253-254.) **†* IPA**
540. S., R. E. Inks for rubber stamps and textiles. (Druggists circular, New York, v. 62, 1918, p. 214.) **† WTA**
- Sachsel, Eugen, joint author. See Hinrichsen, Friedrich Willy, and EUGEN SACHSEL.
541. Saeuberlich, Otto. Normenausschuss für das graphische Gewerbe. Bericht über die letztzeitlichen Arbeiten der Farben-Kommission. (Farben-Zeitung, Berlin, Jahrg. 27, 1922, p. 2624-2625.) **VOA**
Methods of tests for printing ink pigments; also comparative standards for permanency.
Abstract in *Chemical abstracts*, Easton, Penn., v. 16, 1922, p. 3403-3404, *VOA*.

542. St. John, Eugene. Ink and paper troubles, causes and preventives. (Printing art, Cambridge, Mass., v. 26, 1916, p. 457-462.) ***IPA**
543. — Mixing and printing tints to be printed upon. (British printer, London, v. 26, 1916, p. 167.) ***IPA**
544. — On adapting printing ink to various papers. (Caxton magazine, London, v. 14, 1912, p. 43-44.) ***IAA**
545. — Printing on celluloid and oily or greasy surfaces. (Inland printer, Chicago, v. 45, 1910, p. 543.) ***IPA**
546. — What every printer should know about ink. (Printing art, Cambridge, Mass., v. 25, 1915, p. 463-466; v. 26, 1915, p. 41-45.) ***IPA**
547. Salessky, W. Über Indikatoren der Acidimetrie und Alkalimetrie. illus. (Zeitschrift für Elektrochemie, Halle a. S., Jahrg. 10, 1904, p. 204-208.) **PKA**
548. Salm, Eduard. Die Bestimmung des H-Gehaltes einer Lösung mit Hilfe von Indikatoren. (Zeitschrift für Elektrochemie, Halle a. S., Jahrg. 10, 1904, p. 341-346.) **PKA**
549. Sartori, A. Eine angebliche Urkundenfälschung. (Chemiker-Zeitung, Cöthen, Jahrg. 34, 1910, p. 1225.) **VOA**
 "A handwriting expert erroneously declared a certain signature to be forged with lithographic ink and so have been inscribed without the use of an ordinary pen. The case and the manner of proving the error are described." — *Chemical abstracts*.
550. Savage, William. A dictionary of the art of printing. London: Longman, Brown, Green, and Longmans, 1841. 1 p.l., (i) vi-viii, 815(1) p. illus. 8°. ***IPR**
 Principally references to books on printing inks.
551. — Practical hints on decorative printing, with illustrations engraved on wood, and printed in colours at the type press. London: the proprietor, 1822. 5 p.l., iii-vi, 118 p., 2 l., 1 facsim., 44 pl. f°. **††MDO**
 For printing inks, see p. 27-30.
552. Schad, Heinrich. Richtige, vollständige Anleitung zur Liniir-Kunst. Weimar: B. F. Voigt, 1851. 120 p. 3. ed. illus. 16°. ***IPR**
 See chapter 7 for recipes for ruling inks in black and colors.
553. Schaffgotsch, F. G. von. Neue sympathetische Schrift. (Dingler's polytechnisches Journal, Augsburg, Jahrg. 1861, Bd. 160, p. 239.) **3-VA**
 See also *Polytechnisches Notizblatt*, Mainz, Jahrg. 16, 1861, p. 174, **VA**.
- Scheuer, Otto. See Vaubel, William, and Otto Scheuer.
- Schidrowitz, Philip. See Rosenhain, Otto, and Philip Schidrowitz.
554. Schiff, Hugo. Optisches Verhalten der Gerbsäure. (Chemiker-Zeitung, Cöthen, Jahrg. 19, 1895, p. 1680.) **††VOA**
555. — Eine Reaction auf freie Phenolhydroxyle. (Annalen der Chemie und Pharmacie, Leipzig, Bd. 159, 1871, p. 164-168.) **PKA**
556. — Ueber Natur und Constitution der Gerbsäure. (Deutsche chemische Gesellschaft. Berichte, Berlin, v. 4, 1871, p. 231-233.) **PKA**
557. — Untersuchungen über die Natur und Constitution der Gerbsäure. (Liebig's Annalen der Chemie, Leipzig, Bd. 170, 1873, p. 43-87; Bd. 175, 1875, p. 165-178.) **PKA**
558. — Weiteres zur Constitution der Gerbsäure. (Chemiker-Zeitung, Cöthen, Jahrg. 20, 1896, p. 865-866.) **††VOA**
559. Schluttig, Oswald. Tinte. (In: Georg Lunge and Ernst Berl, Chemisch-technische Untersuchungsmethoden. 6. ed. Berlin, 1911. Bd. 4, p. 399-428.) **PMB**
560. — Ink. (In: Georg Lunge, editor. Technical methods of chemical analysis. New York, 1914. v. 3, part 1, p. 511-538.) **PMB**
 — See also Neumann, G. S., and Oswald Schluttig.
561. Schluttig, Oswald, and G. S. Neumann. Die Eisengallustinten. Grundlagen zu ihrer Beurtheilung. Im Auftrage der Firma Aug. Leonhardi in Dresden, chemische Fabriken für Tinten... Dresden: v. Zahn & Jaensch, 1890. vi, 97 p. illus. tables. 8°. **VOPB**
 Much quoted classic on the subject.
562. Schmid, Heinrich. Oxydation der Cellulose. (Jahres-Bericht über die Leistungen der chemischen Technologie für 1883, Leipzig, N. F. Jahrg. 14, 1884, p. 1076-1078.) **VOA**
 Receipt for sympathetic ink.
563. Schneemann, G. Eisen - Gallusgerbsäure-Tinte. (Seifensieder-Zeitung, Augsburg, Jahrg. 40, 1913, p. 150.) **†3-VON**
 Economical method of manufacture on a large scale, substituting dextrine for gum-arabic.
- 563a. Schopper, Theodor. Ein neues Verfahren zur Wiederverarbeitung von altem Druckpapier. (Wochenblatt für Papierfabrikation, Biberach, Bd. 47, Jahrg. 1916, p. 543-544.) ***VMPA**
564. Schrauth, W. Entfernen von Druckschwärze aus Altpapier. (Chemiker-Zeitung, Cöthen, Jahrg. 45, 1921, p. 1090-1091.) **VOA**
 Abstract in *Chemical abstracts*, Easton, Penn., v. 16, 1922, p. 645, **PKA**.
565. Schwarze Anilintinte. (Färberei-Muster-Zeitung, Leipzig, Jahrg. 31, 1882, p. 117-118.) **VLA**
 See also Society of Chemical Industry. *Journal*, London, v. 1, 1882, p. 224, **VOA**.

566. Die **Schwarzfarben** in der Anstrichtechnik. (Farben-Zeitung, Berlin, Jahrg. 25, 1920, p. 274-277, 318-319, 360-362, 406-407, 449-451.) **VOA**

General review of the use of black pigments in printing inks, paints, etc.

567. **Schweizer, Viktor.** The distillation of resins. Resinate lakes and pigments. Carbon pigments and pigments for typewriting machines, manifolders, etc. A description of the proper methods of distilling resin-oils, the manufacture of resinates, resin-varnishes, resin-pigments, and enamel paints; the preparation of all kinds of carbon pigments and printers' ink. London: Scott, Greenwood & Son, 1907. viii, 183 p. illus. 8°. **3-VOP**

568. — The distillation of resins and the preparation of rosin products, resinates, lamp-black, printing inks, typewriting inks, etc., translated from the German of Victor Schweizer. 2d English edition, revised and re-written by H. B. Stocks. London: Scott, Greenwood and Son, 1917. viii, 212 p. illus. 8°. **VOP**

569. The **Scientific American** cyclopedia of formulas, partly based upon the twenty-eighth edition of Scientific American cyclopedia of receipts, notes and queries, edited by Albert A. Hopkins. New York: Scientific American Publishing Co., 1921. vii, 1077 p. illus. 8°. **Desk (Room 121)**

For numerous recipes see p. 908-922.

570. **Scoville, Wilbur L.** The pharmacist's ink. (Scientific American supplement, New York, v. 49, 1900, p. 20152.) **VA**

571. **Secrets concernant les arts et métiers.** Paris: Claude Jombert, 1716. 26 l., 610 p., 1 l. 12°. **VBA**

See chapter 10 for various recipes.

Library also has English edition under title: Valuable secrets in arts, trades, &c. selected from the best authors and adapted to the situation of the United States. New-York: Evert Duyckinck, 1816. iv, (1)6-317(1) p., 9 l. 12°.

572. The **Selection of inks.** (British printer, London, v. 25, 1913, p. 334.) **†*IPA**

573. **Senefelder, Alois.** A complete course of lithography: containing clear and explicit instructions in all the different branches and manners of that art: accompanied by illustrative specimens of drawings. To which is prefixed a history of lithography, from its origin to the present time... With a preface by Frederic von Schlichtegroll. Translated from the original German, by A. S. London: R. Ackermann, 1819. xxviii p., 2 l., 85 p., 1 l., (1)92-342 p., 1 l. illus. 4°. **†MDP**

See chapter 2: Ink, chalk, etching-ground and colours. Several recipes.

Library also has German edition, 1818; French edition, 1819; English edition, 1911.

574. **Senefelder, Ed. Knecht.** Encre indélébile. (Le Technologiste, Paris, tome 28, 1867, p. 198.) **VA**

See also *Polytechnisches Centralblatt*, N. F. Jahrg. 21, 1867, p. 611, **VA**.

575. **Seyda, Anton.** Eine empfindliche Gerbsäure-Reaction. (Chemiker-Zeitung, Cöthen, Jahrg. 22, 1898, p. 1085.) **††VOA**

576. **Seymour, Alfred.** Modern printing inks. A practical handbook for printing ink manufacturers and printers. London: Scott, Greenwood & Son, 1910. vii, 83 p. illus. 8°. **VOPB**

577. — Practical lithography. London: Scott, Greenwood & Son, 1903. xi, 104 p. illus. 8°. **MDP**

See chapters 2 and 10.

578. **Shadwell, Gilbert C.** Use of gas in manufacture and utilization of glue, inks and similar substances. (American gas engineering journal, New York, v. 109, 1918, p. 17-30.) **VOA**

Covers briefly writing and printing inks.

579. **Sharples, Stephen Paschall.** Notes on photographic testing of inks. illus. (American Philosophical Society. Proceedings, v. 34, Jan., 1895, p. 471-477.) ***EA**

580. **Sherman, George.** Practical printing; explaining the ways and means of production in the modern printing plant. New York: Oswald Publishing Co., 1911. 4 p.l., 141 p. illus. 12°. ***IPR**

See chapter 11 on colored printing inks.

581. **Should a pressman make his own ink specialties.** (Inland printer, Chicago, v. 56, 1915, p. 105-106.) **†*IPA**

582. **Sigmund Ullman Company.** "Double tone" inks. (Inland printer, Chicago, v. 42, 1908, p. 395.) **†*IPA**

583. **Silbermann, T., and H. Ozorovitz.** Zur Kenntnis der Eisengallustinten. Über die Fähigkeit der Gallussäuren und verwandter Substanzen, komplexe Salze zu bilden. (Chemisches Zentralblatt, Berlin, Folge 5, Jahrg. 12, Theil 2, 1908, p. 1024-1025.) **PKA**

See also Society of Chemical Industry. *Journal*, London, v. 27, 1908, p. 974-975, **VOA**; *Chemical abstracts*, Easton, Penn., v. 2, 1908, p. 2685, **PKA**; Chemical Society. *Journal: Abstracts*, London, v. 96, part 1, p. 32-33, **PKA**.

Sinclair, W., joint author. See **Bishop, A. W.,** and others.

584. **Sloane, David H.** Cooperation between organizations or associations. (Inland printer, Chicago, v. 67, 1921, p. 234.) **†*IPA**
Status of printer's ink industry discussed.

585. — Printing ink and printing ink makers, a strong plea for consideration. (British printer, London, v. 34, 1922, p. 205-206.) **†*IPA**

586. The **Smell** of printing ink. (Inland printer, Chicago, v. 57, 1916, p. 94-95.)
†* IPA
587. **Smith, J. H.** The fading of printing inks. (British printer, London, v. 30, 1917, p. 15.)
†* IPA
588. **Smith, W. H., and J. B. TUTTLE.** Iodine number of linseed and petroleum oils. Washington: Gov. Prtg. Off., 1914. 17 p. 8°. (United States. — Bureau of Standards. Technologic paper 37.)
VBDA
Testing of "burnt" oil used in manufacture of printing inks.
— See also **Tuttle, John Betley, and W. H. SMITH.**
589. **Soft ink** on bond paper. (Inland printer, Chicago, v. 42, 1909, p. 919.)
†* IPA
590. **Some ink formulas.** (Inland printer, Chicago, v. 9, 1892, p. 1063.)
†* IPA
Recipes for inks for copying without pressure; marking; writing on glass; stencils; rubber stamps; indelible ink; writing on zinc and tin.
591. **Something** about varnish for printing inks. (British printer, London, v. 31, 1918-19, p. 209-210.)
†* IPA
592. **Something** about writing inks. Notes on fluidity, durability, corrosion and copying. (Scientific American supplement, New York, v. 71, 1911, p. 320.)
VA
593. **Southward, John.** Modern printing. A treatise on the principles and practice of typography and the auxiliary arts. London: Raithby, Lawrence & Co., Ltd., 1900. xiv, 861 p., 8 l., 1 diagr., 6 facsim., 5 pl., 2 ports., 1 table. 8°. * IPR
See Section 3, chapter 19: Properties of inks used in colour printing; Section 4, chapter 1, Printing ink.
594. — **Practical printing.** A handbook of the art of typography... The sixth edition by George Joyner. London: The "Printers' Register" Off. [1911.] 2 v. 8°. * IPR
See v. 2, p. 84-92, for general chapter on inks
595. **Specht, Leopold, and FRITZ LORENZ.** Neue Gerbstoff-Bestimmungen. (Chemiker-Zeitung, Cöthen, Jahrg. 25, 1901, p. 5-6.)
†† VOA
596. — **Neue Gerbstoffbestimmung.** illus. (Chemiker-Zeitung, Cöthen, Jahrg. 24, 1900, p. 170-171.)
†† VOA
597. **Special inks** for special purposes. (Inland printer, Chicago, v. 30, 1902, p. 223-224.)
†* IPA
598. **Spence, J. Napier.** Notes on gallotannic and gallic acids. (Society of Chemical Industry. Journal, London, v. 11, 1890, p. 1114-1115.)
VOA
Also in *Zeitschrift für analytische Chemie*, Wiesbaden, Jahrg. 31, 1892, p. 87-89, PKA.
599. **Spica, Matteo.** Considerazioni sul valore tecnico delle sostanze tanniche e nuovo metodo per il riconoscimento e il dosamento dell' acido gallico in esse. (La Gazzetta chimica italiana, Roma, v. 31, 1901, parte 2, p. 201-208.)
PKA
600. **Spicher, Craig Reno.** The practice of presswork. Pittsburgh, 1919. 4 p.l., 240 p. illus. 8°. * IPV
Contains a chapter on the Manufacture of printing ink, by James A. Ullman. Recipes. Doubletone ink.
601. **Spraying of ink.** (Inland printer, Chicago, v. 39, 1907, p. 738.)
†* IPA
Suggestion for avoiding.
602. **Stamping ink** for varnished label. (Inland printer, Chicago, v. 55, 1915, p. 203.)
†* IPA
603. **Standard conditions** for the printing ink industry adopted by the color standardization committee. The adoption of the Ostwald color theory as a standard for measurement of color tones. Discussion of the ten conditions for fastness. (Color trade journal, New York, v. 11, 1922, p. 114-115.)
VOA
604. **Steer, F.** Aus einem Schreiben des Apothekers Herrn F. Steer an Prof. Schrötter. (Kaiserliche Akademie der Wissenschaften, Vienna. Sitzungsberichte, Math.-naturwissenschaftliche Classe, Wien, v. 22, 1856, p. 249-250.)
* EF
Preparation of gallic acid from Turkish nuts.
See also *Jahresbericht über die Fortschritte der Chemie*, Giessen, 1856, p. 482, PKA.
605. **Strachan, James.** The recovery and re-manufacture of waste-paper; a practical treatise printed on paper made entirely from regenerated waste-paper. Aberdeen: The Albany Press, 1918. vi p., 3 l., 158 p. illus. 8°. VMP
Has historical account of de-inking, with descriptions of modern practice. For review see *Paper*, New York, v. 22, 1918, p. 668.
606. **The Structure** of a simple colored ink. chart. (Inland printer, Chicago, v. 56, 1916, p. 117.)
†* IPA
607. **Strunk, H.** Marking inks for laundry use. (Chemical abstracts, Easton, Penn., v. 5, 1911, p. 2743.)
PKA
Abstract only.
608. **Suitable inks** for butter wrappers. (Inland printer, Chicago, v. 37, 1906, p. 409.)
†* IPA
Sullivan, Thomas V., joint author. See **Underwood, Norman, and THOMAS V. SULLIVAN.**
609. **Swan, Robert Thaxter.** Paper and ink. (Boston: Library Bureau, 1895. 20 p. nar. 24°. VMP p.v. 3, no. 4
Repr.: Library journal, New York, v. 20, May, 1895, p. 163-167, *HA.
Discusses writing inks in general.

610. Die **Taetigkeit** des Königlichen Materialprüfungsamtes der Technischen Hochschule Berlin 1906. (Chemiker-Zeitung, Cöthen, Jahrg. 32, 1908, p. 269-270, 289.)

VOA

Brief reference to ink investigations.

Abstract in *Chemical abstracts*, Easton, Penn., v. 2, 1908, p. 2198-2199, *PKA*.

611. **Teclu, Nic.** Über die Entzifferung von Schriftzeichen auf verkohlten und verbrannten Papieren. (Archiv für Kriminal-Anthropologie und Kriminalistik, Leipzig, Bd. 36, 1910, p. 115-121.)

SLA

Abstract in *Chemical abstracts*, Easton, Penn., v. 5, 1911, p. 1724-1725, *PKA*; *Chemisches Zentralblatt*, Berlin, Folge 5, Jahrg. 14, Th. 2, 1910, p. 1337-1338, *PKA*.

612. **Thompson, Albert.** Méthode de dosage volumétrique du tannin et analyse des bois et extraits tanniques. (Académie des sciences. Comptes rendus, Paris, tome 135, 1902, p. 689-691.)

*EO

613. **Thompson, Sir Edward Maunde.** Handbook of Greek and Latin palæography. New York: D. Appleton & Co., 1893. 2 p.l., xii, 343 p., 3 pl. 12°. (International scientific series. v. 70.)

*IC

See p. 50-52.

614. **Thomson, William.** On the chemical composition of the ink on letters and documents as evidence in legal cases. (Manchester Literary and Philosophical Society. Proceedings, v. 19, 1879-80, p. 160-164.)

*EC

Also printed in *Chemical news*, London, v. 42, 1880, p. 32-33, *PKA*.

Abstract in *Chemical Society. Journal*, London, v. 50, Abstracts, 1881, p. 67-68, *PKA*.

615. **Thorpe, Sir Thomas Edward.** A dictionary of applied chemistry. rev. ed. v. 1-5. London and New York: Longmans, Green & Co., 1921-24. 8°.

VO

See v. 3, p. 628-634.

616. **Three-colour inks and their selection.** (British journal of photography, London, Jan. 5, 1912, Colour photography supplement, p. 4.)

MFA

617. **Tieghem, Ph. van.** Sur la fermentation gallique. (Académie des sciences. Comptes rendus, Paris, tome 65, 1867, p. 1091-1094.)

*EO

Abstract in *Zeitschrift für Chemie*, Leipzig, N. F. Bd. 4, 1868, p. 222, *PKA*.

618. **Las Tintas de imprenta i su fabricación.** (Sociedad de fomento fabril. Boletín, Santiago, año 40, 1923, p. 270-274, 317-321, 420-425, 502-508, 552-561.)

VA

619. **Tinting ultramarine.** (Inland printer, Chicago, v. 47, 1911, p. 104.)

†*IPA

620. **To make copying ink print clear.** (Inland printer, Chicago, v. 26, 1901, p. 938.)

†*IPA

621. **To make waterproof india ink.** (Inland printer, Chicago, v. 55, 1915, p. 489.)

†*IPA

622. **To prevent ink drying in cans.** (Inland printer, Chicago, v. 40, 1907, p. 82.)

†*IPA

623. **To prevent ink drying too quickly.** (Inland printer, Chicago, v. 23, 1899, p. 625.)

†*IPA

624. **To remove ink from paper.** (Inland printer, Chicago, v. 43, 1909, p. 102.)

†*IPA

625. **To restore the quality of copying ink.** (Inland printer, Chicago, v. 24, 1899, p. 97.)

†*IPA

626. **Todeschini, Giustiniano.** Über einige Reaktionen zur Unterscheidung von Gerbsäure und Gallussäure. (Chemisches Zentralblatt, Berlin, Folge 5, Jahrg. 3, Theil 1, 1899, p. 64-65.)

PKA

627. **Toovey.** Ink for photolithography and phototypography. (Chemical Society. Journal: Abstracts, London, v. 42, 1882, p. 114.)

PKA

Also in *Chemisches Zentralblatt*, Leipzig, Folge 3, Jahrg. 12, p. 288, *PKA*.

The above are abstracts only.

628. **Traill, Thomas Stewart.** On the composition of a new writing ink, which, in resisting chemical deletion, promises to diminish the chance of the falsification of bills, deeds and other documents. (Royal Society of Edinburgh. Transactions, Edinburgh, v. 14, 1840, p. 419-429.)

*EC

Author was Professor of Medical Jurisprudence in the University of Edinburgh.

629. **Treatment of inks for special work.** (Inland printer, Chicago, v. 31, 1903, p. 231.)

†*IPA

Inks for 3-color halftones.

630. **Treizise, F. J.** The use of colors in embossing and diestamping. (In: Inland printer, A practical guide to embossing and die stamping. Chicago, 1908. 8°. p. 62-67.)

*IPR

631. **Trotman, S. R., and J. E. HACKFORD.** Strychnine tannate and its use in the analysis of tanning materials. (Society of Chemical Industry. Journal, London, v. 24, 1905, p. 1096-1100.)

VOA

Abstract in *Chemisches Zentralblatt*, Berlin, Folge 5, Jahrg. 10, Theil 1, 1906, p. 406-407, *PKA*.

632. **Trouble with copying ink.** (Inland printer, Chicago, v. 38, 1906, p. 95.)

†*IPA

Remedy suggested.

633. **Trouble with copying ink.** (Inland printer, Chicago, v. 40, 1908, p. 593.)

†*IPA

634. **Trouble with vermilion ink.** (Inland printer, Chicago, v. 38, 1907, p. 724.)

†*IPA

Tscherne, R., joint author. See **Herzig, J., and R. TSCHERNE.**

635. **Tschugaeff, L.** Einige Bemerkungen über die Abhandlung von C. Liebermann: "Zur Theorie der Beizenfarbstoffe." (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 41, 1908, p. 2245-2246.)

PKA

636. — Einige Bemerkungen über die Ringbildung bei Komplexverbindungen. (Journal für praktische Chemie, Leipzig, N. F. Bd. 76, 1907, p. 88-93.) **PKA**
637. — Über den Einfluss der Ringbindung auf den Beständigkeitsgrad von Komplexverbindungen. (Journal für praktische Chemie, Leipzig, Bd. 183 [N. F. Bd. 75], 1907, p. 153-168.) **PKA**
638. Tuttle, John Betley, and W. H. SMITH. Analysis of printing inks. Washington: Gov. Prtg. Off., 1914. 20 p. 8°. (United States. — Bureau of Standards. Technologic papers. no. 39.) **VBDA**
Abstract in *Journal of industrial & engineering chemistry*, Easton, Penn., v. 6, 1914, p. 659-660, *VOA*.
- See also Smith, W. H., and J. B. TUTTLE.
639. Tyson, T. M. Effect of colour chemicals in printing processes. (British printer, London, v. 31, 1918-19, p. 229-230.) ***IPA**
640. — Pigments for printing inks. (Society of Chemical Industry. Journal, London, v. 37, 1918, p. 742A.) **VOA**
Abstract only. See also *Chemical abstracts*, Easton, Penn., v. 13, 1919, p. 1158, *PKA*.
641. Ueber die Zusammensetzung der englischen Copirtinte. (Dingler's polytechnisches Journal, Stuttgart, Bd. 76, Jahrg. 1840, p. 157.) **3-VA**
See also *Kunst und Gewerbe-Blatt*, München, Jahrg. 26, Bd. 18, 1840, p. 67, *VA*.
642. Ullmann, Gustav. Prüfungsmethode der in der Färberei verwendeten Gerbmaterien und der basischen Farbstoffe. (Chemiker-Zeitung, Cöthen, Jahrg. 23, 1899, p. 1014-1015.) **††VOA**
643. Ullman, James A. The manufacture of printing ink. (In: C. R. Spicher, The practice of presswork. Pittsburgh, 1919. 8°. p. 113-146.) ***IPV**
644. Unauslöschliche Tinte für Chlorbleiche zum Stempeln und Zeichnen zu bleichender Baumwollen- und Linnenstücke. (Polytechnisches Centralblatt, Leipzig, N. F. Jahrg. 29, 1875, p. 652.) **VA**
Abstract in *Chemical Society. Journal*, London, v. 30, 1876, p. 236, *PKA*; *Chemisches Centralblatt*, Leipzig, Folge 3, Jahrg. 6, 1875, p. 576, *PKA*.
645. Underwood, John. The history and chemistry of writing inks and the permanent character of ancient and modern documents. (Banker's magazine, New York, series 3, v. 12, 1878, p. 894-899, 962-966.) **THA**
646. — On the history and chemistry of writing, printing, and copying inks, and a new plan of taking manifold copies of written and printed documents, maps, charts, plans, and drawings. (Society of Arts. Journal, London, v. 5, 1857, p. 67-74.) **VA**
647. Underwood, John, and F. V. BURT. Copirschwärze für den Druck. (Polytechnisches Centralblatt, Leipzig, N. F. Jahrg. 12, 1858, p. 426.) **VA**
648. Underwood, Norman, and T. V. SULLIVAN. The chemistry and technology of printing inks. New York: D. Van Nostrand Company, 1915. 3 p.l., 139 p. illus. 8°. **VOPB**
Authors have charge of ink-making, United States Bureau of Engraving and Printing.
649. United States. — Bureau of Standards. The composition, properties, and testing of printing inks. Washington: Gov. Prtg. Off., 1915. 35 p. 8°. (United States. — Bureau of Standards. Circular no. 53.) **VBDA**
Has brief bibliography of inks, oils, pigments, and scientific journals.
See also *Scientific American supplement*, New York, v. 81, 1916, p. 43, *VA*.
650. — Inks — their composition, manufacture, and methods of testing. Washington: Gov. Prtg. Off., 1920. 24 p. 8°. (Circular no. 95.) **VBDA**
Brief but excellent general survey.
Abstracted in *Chemical trade journal*, London, v. 68, 1921, p. 6-8, *VOA*; *Chemical age*, New York, v. 28, 1920, p. 290-291, *VOA*.
- 650a. — United States Government master specification for black waterproof drawing ink. Washington: Gov. Prtg. Off., 1925. 3 p. 8°. (Circular no. 196.) **VBDA**
651. Unsuitable ink. (Inland printer, Chicago, v. 43, 1909, p. 103.) **†*IPA**
Recommendations for litho-plate paper.
652. Urban, Wilhelm. Ueber photographische Differenzierung von Tinten. illus. (Jahrbuch für Photographie und Reproduktionstechnik, Halle a. S., Jahrg. 20, 1906, p. 650-652.) **MFA**
Abstract in *Chemical abstracts*, Easton, Penn., v. 1, 1907, p. 19, *PKA*.
653. Ure's dictionary of arts, manufactures, and mines, containing a clear exposition of their principles and practice by Robert Hunt, assisted by F. W. Rudler. v. 1-2, 4. London: Longmans, Green, & Co., 1875-79. 7. ed. 8°. **VB**
For recipes see v. 2, p. 914-916.
654. Use of bentonite in de-inking of newspapers gives promise of forest conservation. (Chemical & metallurgical engineering, New York, v. 27, 1922, p. 744.) **VOA**
655. Utz. Beitrag zur Frage über die Aufspaltung der Gallusgerbsäure. (Chemiker-Zeitung, Cöthen, Jahrg. 29, Semester 1, 1905, p. 31-32.) **††VOA**
656. Valenta, Eduard. Die bunten Druckfarben. Halle a. S.: Wilhelm Knapp, 1914. xii, 309 p. illus. 8°. (In his: Die Rohstoffe der graphischen Druckgewerbe. Bd. 3.) **VOPB**
657. — Fette, Harze, Firnisse, Russ, schwarze Druckfarben und verschiedene

andere in den graphischen Druckgewerben verwendete Materialien (lithographische Tinten, Tusche, Kreiden, Walzenmassen, Feuchtwasser, Drucktinkturen, Lacke, Um-druck-, Deck-, Stempelfarben u. s. w.). Halle a S.: Wilhelm Knapp, 1908. xv, 346 p. illus. 8°. (In his: Die Rohstoffe der graphischen Druckgewerbe. Bd. 2.) **VOPB**

658. — Über die Lichtechtheit und das Verhalten verschiedener Teerfarbstofflacke als Druckfarben. (Chemiker-Zeitung, Cöthen, Jahrg. 30, 1906, p. 901-904; Jahrg. 33, 1909, p. 1165-1167.) **VOA**

Translation in *British journal of photography*, London, v. 53, 1906, p. 770-773; v. 56, 1909, *Colour photography supplement*, p. 92-94, *MFA*.

659. Vanderstichel, A. A fast ink for use in paper mills. (Chemical abstracts, Easton, Penn., v. 17, 1923, p. 3419.) **PKA**

Abstract only. Ink will not fade even when exposed for several months to the atmosphere of the bleaching room.

660. Vandevelde, A. J. J. Influence of acidity of paper on the fading of ink. (Society of Chemical Industry. Journal, London, v. 26, 1907, p. 548.) **VOA**

661. — Notes de chimie sur les papiers et les encres. (Revue des bibliothèques et archives de Belgique, Bruxelles, tome 4, 1906, p. 77-85.) *** HA**

Author is director of the city laboratory of Ghent. Gives results of durability tests on five types of ink.

662. Vaubel, Wilhelm, and Otto SCHEUER. Zur Frage der Bestimmung der Gerbsäure in Gerbstoffen. illus. (Zeitschrift für angewandte Chemie, Berlin, Jahrg. 19, 1906, p. 2130-2133.) **PKA**

663. Vermilion ink affecting electros. (Inland printer, Chicago, v. 41, 1908, p. 410.) **†* IPA**

664. Vermilion not a stable pigment. (Inland printer, Chicago, v. 47, p. 729.) **†* IPA**

665. Vèzes, M., and G. DUPONT. Résins et térébenthines, les industries dérivées. Paris: J. B. Baillière et fils, 1924. 656 p. illus. 8°. **VOP**

See p. 568-597 for manufacture of blacks, printing inks, Chinese ink, lithographic and autographic inks and pencils.

666. Viedt, C. H. Bereitung einer schwarzen Anilintinte. (Polytechnisches Notizblatt, Mainz, Jahrg. 30, 1875, p. 290-291.) **VA**

See also *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 29, p. 1494-1495, *VA*.

667. — To make gold and silver inks. (Practical magazine, London, v. 5, 1875, p. 275-276.) **3-VA**

668. — Ueber Anilintinten. (Dingler's polytechnisches Journal, Augsburg, Jahrg. 1874, Bd. 214, p. 167-169.) **3-VA**

See also *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 29, 1875, p. 47-49, *VA*.

669. — Ueber die Herstellung guter Gold- und Silbertinten. (Dingler's polytechnisches Journal, Augsburg, Bd. 215, 1875, p. 567.) **3-VA**

See also *Polytechnisches Notizblatt*, Mainz, Jahrg. 30, 1875, p. 186-187, *VA*.

670. — Ueber schwarze Schreibtinten. (Dingler's polytechnisches Journal, Augsburg, Bd. 216, 1875, p. 453-456, 532-535; Bd. 217, p. 73-77, 146-150.) **3-VA**

Several formulas. Abstract in *Jahresbericht der chemischen Technologie*, Leipzig, Jahrg. 21, 1876, p. 998-1011, *VOA*; *Chemical Society. Journal*, London, 1876, v. 1, p. 821-823, *PKA*.

671. Vieli, G., and others. Die primären Tintensalze der Eisentinten. (Liebig's Annalen der Chemie, Leipzig, Bd. 435, 1924, p. 233-264.) **PKA**

672. Villon, A. M. Fabrication de l'encre pour la taille douce. (Société chimique de Paris. Bulletin, Paris, série 3, tome 9, 1893, p. 929-936.) **PKA**

Good abstract in *Society of Chemical Industry. Journal*, London, v. 13, 1894, p. 721, *VOA*.

673. Vogel, August. Ueber die blaue Tinte aus Berlinerblau. (Dingler's polytechnisches Journal, Augsburg, Bd. 169, 1863, p. 232.) **3-VA**

See also *Polytechnisches Notizblatt*, Mainz, Jahrg. 18, 1863, p. 220-221, *VA*; *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 17, 1863, p. 1246, *VA*.

Voigtlaender, F., joint author. See Dennstedt, M., and F. VOIGTLAENDER.

674. Vortheilhafte Bereitung einer dauerhaften schwarzen Tinte aus den Beeren des Sambucus Ebulus. (Dingler's polytechnisches Journal, Stuttgart, Bd. 151, 1859, p. 466.) **3-VA**

See also *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 13, 1859, p. 751, *VA*.

675. W., J. C. Waterproof black ink. (American druggist, New York, v. 63, no. 3, 1915, p. 45.) **†† WTA**

676. Wackenroder, H. Beiträge zur Kenntniss der Catechusäure. (Annalen der Pharmacie, Heidelberg, Bd. 31, 1839, p. 72-79.) **PKA**

677. Wade, H. D., & Co. Wade's standard printing inks manufactured in every variety of black & colors. New York [1875]. 121 p. illus. obl. 12°. **VOPB**

Catalogue of shades and prices.

678. Wagner, Hans. Bronze-, Atlas- und Reflexfarben. (Farben-Zeitung, Berlin, Jahrg. 25, 1920, p. 18-19.) **VOA**

Abstract in *Chemical abstracts*, Easton, Penn., v. 14, 1920, p. 636, *PKA*.

A brief review of the use of metallic pigments, mixtures of these with other pigments, and of fluorescent dyes and lakes in the production of paints and inks that have metallic lusters.

679. — Die graphischen Farben. (Chemiker-Zeitung, Cöthen, Jahrg. 46, 1922, p. 421-424.) **VOA**

680. — Neue Lack- und Pigment-Farbstoffe. (Farben-Zeitung, Berlin, Jahrg. 28, 1923, p. 1386-1389.) **VOA**
Has a tabulation of characteristics and designations.
681. Walden, P. Ueber das optische Verhalten des Tannins. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 30, Bd. 3, 1897, p. 3151-3156.) **PKA**
682. — Ueber die vermeintliche Identität des Tannins mit der a-Digallussäure. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 31 (1898), Bd. 3, 1899, p. 3167-3174.) **PKA**
683. Walker, Percy Hargraves. Some technical methods of testing miscellaneous supplies, including paints and paint materials, inks, lubricating oils, soaps, etc. Washington: Gov. Prtg. Off., 1908. 48 p. 8°. (United States. — Chemistry Bureau. Bulletin 109.) **VPH**
See p. 29-36 for writing, canceling, and rubber stamp inks.
684. Walther, Bruno. Die Fabrikation von Pausfarben und Durchschlagpapieren. (Chemiker-Zeitung, Cöthen, Bd. 45, 1921, p. 287-288.) **VOA**
See also *Scientific American monthly*, New York, v. 4, 1921, p. 307-308, *VA*.
685. — Die Fabrikation von Schreibmaschinenschriften und -Bändern. (Chemiker-Zeitung, Cöthen, Jahrg. 45, 1921, p. 169-171.) **VOA**
Translated in *Scientific American monthly*, New York, v. 3, 1921, p. 536-537, *VA*; *La Revue des produits chimiques*, Paris, année 24, p. 119-120, *PKA*.
686. — Das Ferrisulfatchlorid in der Tintenfabrikation. (Chemiker-Zeitung, Cöthen, Bd. 45, 1921, p. 842.) **VOA**
See also *Seifensieder-Zeitung*, Augsburg, Jahrg. 48, 1921, p. 745-746, 763-764, 780-781, 3-VON; *Chemical abstracts*, Easton, Penn., v. 16, 1922, p. 350, *PKA*.
687. — Die Tintenfabrikation. (Chemiker-Zeitung, Cöthen, Jahrg. 45, 1921, p. 430-432.) **VOA**
Formulas for various kinds of inks.
688. Wangner, Hermann. Entfernung von Druck- und Schriftzeichen aus bedrucktem Papier. (Chemiker-Zeitung, Cöthen, Jahrg. 35, 1914, p. 927-928.) **VOA**
Abstract in *Society of Chemical Industry. Journal*, London, v. 33, 1914, p. 858, *VOA*.
689. Wanted gloss effect on black ink. (Inland printer, Chicago, v. 33, 1904, p. 701.) **IPA**
690. Wants a black ink that can be removed from paper with a steel pointer. (Inland printer, Chicago, v. 24, 1899, p. 253.) **IPA**
Editor has no knowledge of such an ink.
691. Wants to prevent purple fading. (Inland printer, Chicago, v. 30, 1903, p. 761.) **IPA**
692. Wants to remove ink from aluminum. (Inland printer, Chicago, v. 24, 1900, p. 577.) **IPA**
693. Warhurst, B. W. A colour dictionary, giving about two hundred names of colours used in printing, etc. Specially prepared for stamp collectors. London: S. Gibbons, 1899. 1 p.l., 48 p., 1 col'd pl. 8°. **TVG**
694. Wattenbach, Wilhelm. Das Schriftwesen im Mittelalter. Leipzig: S. Hirzel, 1875. viii, 569 p. 2. ed. 8°. **IC**
See p. 193-203. Etymology discussed and several recipes given with footnote references.
695. Wegler, Th. Rothe Tinte zum Zeichnen der Wäsche. (Bayerisches Industrie- und Gewerbe-Blatt, München, Jahrg. 6, 1874, p. 209.) **VA**
See also *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 28, 1874, p. 1370, *VA*; *Polytechnisches Notizblatt*, Mainz, Jahrg. 29, 1874, p. 303, *VA*.
696. Wehrs, Georg Friedrich. Vom Papier, den vor der Erfindung desselben üblich gewesenen Schreibmassen, und sonstigen Schreibmaterialien. Halle: J. J. Gebauer, 1789. 8 p.l., 728 p., 14 l. 8°. **VMP**
See chapter 11 for history and recipes.
697. Wells, Sidney D. The de-inking of old newspapers. (Canadian pulp & paper magazine, Gardenville, P. Q., v. 20, 1922, p. 599-602.) **VMPA**
698. — Making newspapers from old paper stock. De-inking processes for old newspapers and the use of bentonite as peptizing agent. (Paper, New York, v. 30, no. 14, 1922, p. 7-10.) **VMPA**
699. Wende, Hermann. Ueber Trimethylanthragallol. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 20, 1887, p. 867-870.) **PKA**
- Wense, W., joint author. See Liebermann, C., and W. WENSE.
700. Werner, A. Über die Schwärze von Tintenflecken auf Papier. (Zeitschrift für Elektrochemie, Halle a. S., Bd. 22, 1916, p. 23-27.) **PKA**
Abstract in *Society of Chemical Industry. Journal*, London, v. 35, 1916, p. 428-429, *VOA*.
701. — Zur Theorie der Beizenfarbstoffe. (Deutsche chemische Gesellschaft. Berichte, Berlin, Jahrg. 41, 1908, p. 1062-1071, 2383-2386.) **PKA**
702. Westcott, Henry P. Where the printer gets his ink. America's carbon-black industry and the methods it employs. illus. (Scientific American, New York, v. 124, 1921, p. 88, 99-100.) **VA**
703. Why printing inks must be dearer. (British printer, London, v. 32, 1920, p. 196.) **IPA**

704. **Wilkinson, W. J.** Standardizing colour process inks. (British printer, London, v. 32, 1919, p. 107-108; v. 34, 1921, p. 27-28.)
†* IPA
705. **Wilkinson, W. T.** Photo-mechanical processes. A practical guide... London: Hampton & Co. [1892?] vii(i), 7-216 p. illus. 3. ed. 12°. MDS
See index.
706. **Winterniss, J.** Ueber Anfertigung der sogenannten Alizarin-Tinte. (Kunst und Gewerbe-Blatt, München, Jahrg. 42, Bd. 34, p. 370.) VA
707. — Ueber die sogenannte Alizarin-Tinte. (Dingler's polytechnisches Journal, Stuttgart and Augsburg, Bd. 139, 1856, p. 447-450.) 3-VA
See also *Polytechnisches Centralblatt*, Leipzig, N. F. Jahrg. 10, 1856, p. 767, VA.
708. **Wisbar, G.** Writing inks, their estimation. (Society of Chemical Industry. Journal, London, v. 15, 1896, p. 55.) VOA
709. **Wislicenus, H.** Über Gerbmaterianalyse mit "gewachsener" Tonerde. (Zeitschrift für analytische Chemie, Wiesbaden, Jahrg. 44, 1905, p. 96-106.) PKA
710. — Versuche zur Gerbstoffbestimmung ohne Hautpulver. (Zeitschrift für angewandte Chemie, Berlin, Jahrg. 1904, p. 801-810.) PKA
711. **Wislicenus, Wilhelm.** Ueber einige Aldehydsäuresster. (Deutsche chemische Gesellschaft. Berichte, Berlin, Bd. 20, 1887, p. 2930-2934.) PKA
712. — Ueber die Isomerie der Formylphenylessigester. (Deutsche chemische Gesellschaft. Berichte, Berlin, Bd. 28, 1895, p. 767-774.) PKA
713. — Ueber die Isomerie der Formylphenylessigester. (Liebig's Annalen der Chemie, Leipzig, Bd. 291, 1896, p. 147-216.) PKA
Not the same as the previous entry.
714. — Ueber Tautomerie. (Sammlung chemischer und chemisch-technischer Vorträge, Stuttgart, Bd. 2, 1898, p. 187-256.) PKA
See p. 242 for iron salts.
715. **Wittstein, G. C.** On the preparation of gallic acid from Chinese gall-nuts. (Pharmaceutical journal and transactions, London, v. 12, 1852-53, p. 444-445.) WTA
Wolff, F., joint author. See **Klaproth, M. H.**, and **F. Wolff**.
- Wolff, Hans**, joint author. See **Zellner, Heinrich**, and **HANS WOLFF**.
716. **Wood, George W.** Scientific handwriting testimony. Higher art of handwriting and typewriting investigation explained and illustrated. Court rulings and noted cases cited. Pittsburgh: Cramer Printing and Publishing Company, Crafton Branch, cop. 1922. 3 p.l., 9-76 p., 4 l. illus. 8°. *ICL
717. **The Word "ink."** (Inland printer, Chicago, v. 4, 1887, p. 468.) †* IPA
Equivalents in ancient and Oriental languages.
718. **A Word on ink.** (Chambers' Edinburgh journal, Edinburgh, v. 12, 1850, p. 120-122.) *DA
719. **The Wratten tricolour ink-tester.** (British journal of photography, London, v. 56, Jan. 22, 1909, p. 69.) MFA
720. **Writing ink in cakes.** (American druggists' circular, New York, v. 1, 1857, p. 67.) †† WTA
Leonhardi's formula.
721. **Wyman, Walter F.** The American writing ink industry. illus. (Export American industries, New York, v. 19, 1912, no. 2, p. 51-53.) † TLA
Factory pictures.
722. **Yano, M.** Microscopical examination of printed paper. (Society of Chemical Industry. Journal, London, v. 36, 1917, p. 868.) VOA
Abstract only. Also in *Paper makers' monthly journal*, London, v. 55, 1917, p. 347, †VMPA.
Study of the penetration of paper by ink.
723. **Young, Sydney.** A distinctive test for gallic acid. (Chemical news, London, v. 48, 1883, p. 31-32.) PKA
724. **Zander, C. G.** The influence of colored stock on colored ink. table. (Inland printer, Chicago, v. 43, 1909, p. 382-383.) †* IPA
725. **Zaunick, Rudolph.** Tintenrezepte des 15. und 16. Jahrhunderts. (Geschichtsblätter für Technik, Industrie und Gewerbe, Berlin, Bd. 4, 1917, p. 74-75.) V
Recipes from *Kochbuch von Maister Hannsen des von Wirtenberg Koch*, 1460.
726. **Zechlin.** Unauslöschliche Tinte zum Zeichnen der Wäsche. (Polytechnisches Centralblatt, Leipzig, N. F. Jahrg. 16, 1862, p. 959.) VA
727. **Zellner, Heinrich**, and **HANS WOLFF.** Über die Ursachen der Hauterkrankungen im Buchdruckgewerbe. (Zeitschrift für Hygiene und Infektionskrankheiten, Leipzig, Bd. 75, 1913, p. 69-80.) WAA
Tabular data of materials used.
728. **Zwick, Karl G.** Die Verwendung des Zeiss'schen Eintauch-Refraktometers für die Gerbstoffanalyse. illus. (Chemiker-Zeitung, Cöthen, Jahrg. 32, 1908, p. 405-406.) †† VOA

PATENTS

This list is compiled from official documents containing either specifications or abstracts, no attempt having been made to index publications which list titles only. Patents relating to printing inks are indicated by a star (*).

ABBREVIATIONS

Aus.: Auszüge aus den Patentschriften.
 Aus. off. jour.: Australian official journal.
 Ber.: Berichte der Deutschen chemischen Gesellschaft.
 Bull. Soc. Chim.: Bulletin de la Société chimique.
 C. A.: Chemical abstracts (American).
 Cent.: Chemisches Centralblatt.
 Chem. tech. Übers.: Chemisch-technische Übersicht.
 Chem. Ztg.: Chemiker-Zeitung.
 Chim. et ind.: Chimie et industrie.
 Des.: Description des machines et procédés pour lesquels des brevets d'invention ont été pris.
 Gaz.: New Zealand gazette (supplement).
 J. A. C. S.: Journal of the American Chemical Society.
 J. S. C. I.: Journal of the Society of Chemical Industry.
 Jahr. Chem.: Jahresbericht der Chemie.
 Kunst.: Kunststoffe.
 Lange: Lange, Otto, Chemisch-technische Vorschriften, ed. 3, 1923-24.
 Lond. jour.: London journal (Newton's).
 Mec. mag.: Mechanics' magazine.
 Mon. sc. B.: Moniteur scientifique (Choix de brevets, supplément).
 Pat. O. R.: Canadian Patent Office record.
 Poly. Cent.: Polytechnisches Centralblatt.
 Ptb.: Oesterreichischer Patent Blatt.
 Rec.: Recueil des brevets d'invention.
 Rep.: Chemisch-technisches Repertorium (Supplement to Chemiker-Zeitung). Formerly Chemisches Repertorium.
 Repertory: Repertory of arts.
 Rev. chim. ind.: Revue de chimie industrielle.
 Tech. chem. J.: Technisch-chemisches Jahrbuch.
 Wag. Jahr.: [Wagner's] Jahresbericht über die Leistungen der chemischen Technologie.
 Zeit. ang. C.: Zeitschrift für angewandte Chemie.

UNITED STATES

The Reports of the Commissioner of Patents, 1845-1871, contain abstracts. Library has specifications, 1871-date.

729. Cist, J. 1808.
 Mineral black for printing.

*730. Chase, B. 1810.
 Printers' ink.

731. Rennie, J. 1834.
 Coloring matter.

*732. Myers, J. D. 1835.
 Writing ink.

733. Spear, T. J. 2176. 1841.
 Indelible ink.

734. Ferris, P. 2870. 1842.
 Black ink.

*735. Clark, E. 4102. 1845.
 Printers' ink. Colophony, rosins or bitumens, and lampblack.

*736. Mathews, M. M. 7686. 1850.
 Use of rosin oil in printers' ink.

737. Harrison, A. 8755. 1852.
 Ink-making vessel.

Patents—United States, continued.

- *738. **Turner, S. H.** 10006. 1853.
Printers' ink. Colophonic tar, lampblack, indigo blue, indian red, rosin soap.
- *739. **Thompson, C. A.** 12733. 1855.
Printers' ink. Litharge, acetate of lead, linseed oil, gum copal.
- *740. **Matthews, G.** 17688. 1857.
Printers' ink. Calcined green oxide of chromium and linseed oil.
- *741. **Smillie, G.** 37984. 1863.
Green ink for steel plate printing. Asbestos, chromium, and oil.
- *742. **Underwood, J., and F. V. BURT.** 38008. 1863.
Printers' and copying ink. Nut-galls, iron sulphate, gum senegal, treacle, soap, lampblack, prussian blue, water.
- *743. **Eaton, A. K.** 38298. 1863.
Safety printers' ink. Chromite of baryta.
- *744. **Hunt, T. S.** 40839. 1863.
Safety printers' ink. Based on per-oxide of tin and a small proportion of oxide of chromium or other metallic oxides.
745. **Rogers, R. H.** 42405. 1864.
Stamping ink. Coloring matter in a menstrum of the fibre or dust of leather to produce a "pulp" ink.
746. **Lummrus, T. J.** 46684. 1865.
Red writing ink. Rosin, alcohol, water, gum acacia, and gum myrrh.
747. **Holt, H.** 47494. 1865.
Stamping ink. Anilin red and glycerin.
- *748. **Hulot, A. A.** 47909. 1865.
Printers' ink. Glue, honey, water, and glycerin instead of varnish or oil commonly used.
- *749. **Duryee, G.** 48385. 1865.
Printers' ink. Petroleum distillation residue, sulphuric acid. Produces "petrolene wax" to be substituted for linseed or other oils.
- *750. **Whitefield, E.** 48471. 1865.
Printers' ink. Nitric acid, sulphuric acid, logwood, chinese blue, iron filings.
751. **Macdonough, J.** 52869. 1866.
Ink for postage stamps. Gelatin, glycerin, and color.
- *752. **Sangster, J. A. W., and H. H. SANGSTER.** 53379. 1866.
Printers' ink. Oil, rosin, soap, and pulverized coal.
753. **Lanza, John.** 55679. 1866.
Writing ink to show metallic lustre. Gum arabic, gum ammoniac, water, garlic juice, and bronze powder.
754. **Bowman, A. D.** 59549. 1866.
Writing ink. Logwood, bichromate of potash, prussiate of potash, water.
- *755. **Loewenberg, E.** 63733. 1867.
Printers' colored ink from saccharine substance in combination with glycerin or oily matter, or both, and color.
756. **Loewenberg, H.** 63734. 1867.
Marking ink. Iodine or bromine added to ordinary writing ink.
757. **Petitdidier, F.** 64562. 1867.
Applying designs in relief and brilliancy to woven fabrics.
758. **Owens, B.** 65002. 1867.
Writing ink. Hot water, paris blue, ox-gall, alcohol.
- *759. **Weissberger, M.** 65973. 1867.
Printers' ink. Mineral resin, hydrocarbon oil, and lampblack.
- *760. **Wurtz, H.** 67697. 1867.
Printers' ink from grahamite.
761. **Shaw, J.** 69846. 1867.
Writing ink. Water, logwood, sodium bicarbonate, potassium cyanide, prussiate of potash.
762. **Francis, L.** 72621. 1867.
Ruling ink. Anilin, acetic acid, and galls.
- *763. **Wurtz, E.** 74188. 1868.
Printers' ink from grahamite.
764. **Seidel, C.** 76107. 1868.
Coloring matter from cashew nut.
765. **Buzby, A. G.** 78258. 1868.
Copying ink. Water, galls, iron sulphate, indigo, sugar, gum arabic, or other ingredients in combination with glycerin or gelatine, or both, and bichloride of mercury.
- *766. **Wulsten, C.** 79045. 1868.
Printers' colored ink. Silicate of alumina, clay, prepared with zinc sulphate and with or without dilute sulphuric acid, and dyeing materials.
767. **McNeil, D. C.** 79374. 1868.
Sympathetic ink. Sulphuric acid, water, and sugar.
768. **Bloede, V. G.** 87088. 1869.
Stain removing compound.
769. **Dougherty, D. A.** 87094. 1869.
Black writing ink. Anilin blue, with iron salts, and galls or tannin.
- *770. **McKellar, D.** 87350. 1869.
Printers' ink for leather. Varnish, paint, and bronze powders.
771. **Zengeler, J.** 90417. 1869.
Ink powder from anilin colors.
- *772. **Kréci, C.** 94220. 1869.
Printers' ink. Coal tar with wood charcoal and nitric acid.
- *773. **Farrar, A.** 100877. 1870.
Printers' ink, using a "new oily product, or such product with pigments and a saccharin syrup."
774. **Simonds, J. P.** 101170. 1870.
Stamping ink. Combines orchil with a printing ink.
- *775. **Francis, L.** 102243. 1870.
Printers' ink. Glycerin, saccharin, and gums.
776. **Caldwell, J. M., and G. W. CALDWELL.** 102915. 1870.
Indelible ink. Carbon, metallic salt, vegetable color, and anilin.
- *777. **Casilear, G. W.** 104554. 1870.
Printers' ink. Combination of "patent drier" with glycerin and boiled molasses.
- *778. **Loewenberg, H.** 104862. 1870.
Printers' ink. Adds prussiate of potash to ordinary printers' ink.
- *779. **Turly, M., and B. F. THOMAS.** 105014. 1870.
Printers' ink. Volatilizes rosin or pitch.
780. **Panknin, C. F.** 106198. 1870.
Non-corrosive ink.

Patents—United States, continued.

- 781. Hebel, C.** 106582. 1870.
Indelible writing ink.
- 782. Beck, F.** 107997. 1870.
Compound for coloring paper.
- *783. McIlvaine, C.** 108615. 1870.
Printers' copying ink, using gums.
- 784. Loftus, R. G.** 109327. 1870.
Writing ink.
- *785. Kircher, J.** 110048. 1870.
Printers' ink. Peroxide and protoxide of iron, and varnish.
- *786. Farrar, A.** 113755. 1871.
Printers' ink.
- *787. Turly, M.** 113947. 1871.
Printers' ink.
- 788. Walsh, E. F., and S. DURYEA.** 115915. 1871.
Writing ink. Shellac, borax, water.
- *789. McIlvaine, C.** 117313. 1871.
Printers' ink. Black color, glycerin, soluble gums, acid, and saccharin matter.
- 790. McIlvaine, C.** 117314. 1871.
Copying ink for ruling and printing. Soluble color in glycerin, alcohol, and water, together with soluble gums, an acid, and saccharin matter.
- *791. Kircher, J.** 119154. 1871.
Printers' ink. Iron dissolved in an acid and mixed with tannic or gallic acid, or both. Precipitate is treated with alkali and ground in varnish.
- 792. Blaney, J. V. Z.** 121321. 1871.
Restoring writing or printing on charred paper.
- 793. Carter, J. W.** 124544. 1872.
Process of driving air into writing ink.
- 794. Popper, I.** 125077. 1872.
Writing ink. Oil, resin, soap, carbon, and kerosene.
- *795. White, J. C.** 126601. 1872.
Printers' ink. Oil of gascar.
- *796. Guichard, A. D. G.** 128302. 1872.
Printers' ink for textiles.
- *797. Horton, H. G.** 131444. 1872.
Printers' ink. Glue, glycerin, plumbago, linseed oil, lampblack, copper sulphate, gum copal, bone dust.
- 798. Little, G.** 131886. 1872.
Telegraphic ink. Powdered anilin heated with glycerin.
- 799. Popper, J.** 132102. 1872.
Writing ink. Lampblack, glycerin, gum arabic, and water.
- *800. Kircher, J.** 132840. 1872.
Printers' ink. Coal tar, caustic soda, coal oil, black oxide of manganese.
- 801. Briggs, E. W.** 133197. 1872.
Indelible ink. Silver, soda, gum, honey, color, ammonia, and water.
- 802. Slade, N. P.** 133954. 1872.
Writing ink. Water, borax, logwood, bichromate of potash, glycerin, and alcohol.
- 803. Martin, J.** 134434. 1872.
Mixing and grinding apparatus.
- 804. Jud, J. B. F.** 140782. 1873.
Stamping ink. Red anilin, citric acid, mucilage, glycerin, and acetic acid.
- 805. Jud, J. B. F.** 147384. 1874.
Paste inks. Recipes for black, red, blue, violet, and green. Also a copying ink.
- *806. Loase, J. F.** 150475. 1874.
For electrotyping, stereotyping, etc. Sulphuric acid, sugar, and water, producing an ink capable of presenting characters in relief.
- 807. Teysonniere, A.** 151633. 1874.
Copying ink. Oxalate, or oxalic acid, color, and sugar.
- 808. Reams, I. M.** 156379. 1874.
Writing ink. Logwood, bichromate of potash, alcohol, and water.
- 809. Dexter, A. J.** 167878. 1875.
Copying ink. Nut galls, iron sulphate, gum arabic, sugar, water, glycerin, nitrate of silver, and cloves.
- *810. Briedbach, C. J., and C. BRIEDBACH.** 168134. 1875.
Carmine printers' ink. Carmine, ammonia, and varnish.
- 811. Bonney, W. A.** 170513. 1875.
Ink powder. Logwood, bichromate of potash, prussiate of potash, gum arabic and copperas.
- 812. Ehrhardt, L. H. G.** 172721. 1876.
Extracting printers' ink from rags. Treats successively with linseed oil, turpentine, alkaline bath, and acid.
- 813. Marshall, D. M.** 174917. 1876.
Indelible ink for canceling postage stamps. Printers' ink and carbolic acid.
- 814. Robertson, J. T.** 181597. 1876.
Renovating waste ink. Immerses in water, runs through centrifugal machine, and grinds.
- 815. Vander Linden, W. F., and H. C. KING.** 188212. 1877.
Canceling ink. Cotton-seed oil, oil varnish, ivory black, rosin black, and colors.
- 816. Taylor, J. M.** 189813. 1877.
Non-corrosive writing ink. Gum and silicate.
- *817. Collins, C.** 192739. 1877.
Printers' ink. Crude turpentine, linseed oil, and rosin.
- 818. Tilman, N. T.** 194015. 1877.
Writing ink. Tincture of chloride of iron, acetic acid, chloride of sodium, logwood, and bichromate of potash.
- 819. Hover, J. E.** 194966. 1877.
Canceling ink. Lampblack, hydrochloric acid, and linseed oil.
- 820. Egerton, C. C.** 198090. 1877.
Canceling ink. Insoluble colors and abrading materials.
- 821. Wells, G. A.** 199883. 1878.
Writing ink. Gelatinization prevented by neutralizing acids with ammonia. Sodii boras, shellac, lampblack, camphor, alcohol, ammonia, and water.
- 822. Richmond, H., and W. S. RICHMOND.** 203372. 1878.
Canceling and writing ink. Eosin, blue and black anilin, cupric chloride, sodium chlorate, ammonium chloride, glycerin, and oil.
- 823. Mendel, E.** 216625. 1879.
Safety ink. Glycerin, starch, zinc white, grape sugar or glucose, and color.

Patents—United States, continued.

- 824. Collins, G. J.** 216832. 1879.
Capsuled ink powders, using gelatine.
- *825. Kircher, J.** 223363. 1880.
Safety printing ink. Rosin, turpentine, linseed oil, olive oil, and color.
- *826. Connelly, M.** 235670. 1880.
Printers' ink. Based on crude petroleum and lime boiled at 350° F.
- *827. Hendrichs, J.** 239954. 1881.
Lithographic inks. Drop white, copperas, bichromate of potash, sulphur, black union dye.
- 828. Morse, A. N.** 239974. 1881.
Indelible ink. Water, caustic potash, seed-lac, permanganate of potash, and lampblack.
- 829. Mallory, J. E.** 241682. 1881.
Writing ink. Extract of galls or gallic acid, tannic acid, and salts of iron subjected to oxygen.
- 830. Froehling, H.** 243441. 1881.
Indelible ink. Lampblack, caustic alkali, and asphaltum.
- *831. Bastand, C. T.** 247597. 1881.
Printers' ink. Passes bisulphide of carbon through engineers' cotton waste and distills the product.
- 832. Stoddart, A. F.** 255352. 1882.
Writing ink from spent tanning liquor.
- 833. Reid, P.** 256596. 1882.
J.S.C.I., 1882, v. 1, p. 187.
Ink for dyeing purposes. Pyroxline, color, camphor, and menstrum.
- *834. Reid, P.** 256597. 1882.
J.S.C.I., 1882, v. 1, p. 187.
Printing ink for textiles. Based on pyroxline.
- 835. Magne, J. J.** 260583. 1882.
Writing ink. Albumen, ferrocyanide of potash, color, and water.
- 836. Goold, O. A.** 263508. 1882.
Writing ink. Hemlock bark, prussiate of potash, and nitrate of iron.
- *837. Reissig, W.** 265867. 1882.
Printers' ink. Dioxide of manganese and linseed oil varnish.
- 838. Kendall, E. D.** 273240. 1883.
Writing ink. Ammonia solution, resin, and color.
- 839. Reissig, W.** 277342. 1883.
Stamping ink. Linseed oil size or varnish, lampblack, and an iron chloride or protochloride.
- 840. Franseky, J.** 299372. 1884.
Ink to give metallic surface to paper.
- 841. Appleyard, T. W., Jr., and others.** 306456. 1884.
Soluble black from waste tan liquor.
- 842. Clawson, L. P.** 308138. 1884.
Ink and paint mill.
- 843. Kennerly, G., and B. CREIGHTON.** 312474. 1885.
Transfer ink. Resin, turpentine, and color.
- 844. Schmucker, W. Y.** 313246. 1885.
Ink grinder.
- 845. Ogilvy, D. J.** 330613. 1885.
Manufacture of rosin compounds.
- 846. Mueller-Jacobs, A.** 342207. 1886.
Coloring compound. Resinate, color, and alcohol.
- 847. Buchten, A.** 342279. 1886.
Ink remover. Water, citric acid, borax, and chloride of lime.
- 848. Lange, J. H.** 343378. 1886.
For producing color on wall-paper.
- *849. Ramsdell, I.** 345448. 1886.
Lithographic ink. Bichromate of potash, gelatine, prussiate of potash, water, tannate of iron, and color.
- 850. Underwood, J. T., and F. W. UNDERWOOD.** 348072-73. 1886.
Carbon paper ink.
- 851. Whitefield, L.** 351949. 1886.
Stencil ink. Benzine, bronze powder, kerosene, and color.
- *852. Stanchfield, G. M.** 369969. 1887.
Printers' ink reducer. Kerosene oil, sulphuric ether, essential oil of sassafras, and oil of cloves.
- 853. Dimitry, C. P.** 370383. 1887.
Indelible ink. Water, gelatine, bichromate of potash, diamond slate dye, creosote, and india ink.
- *854. Bailey, L.** 375720. 1888.
Printers' ink. Palm oil and anilin color.
- 855. Lefferts, M. C., and J. H. STEVENS.** 380654. 1888.
Ink for celluloid.
- 856. Johnston, T. R.** 383576. 1888.
Ink mill.
- 857. Soltmann, E. G.** 397146. 1889.
Slab for india-ink.
- 858. Stevens, W. X.** 408143. 1889.
Ink-grinding slab.
- *859. Holt, O. G.** 412183-84. 1889.
Printers' and lithographic ink. Maltha and pigment.
- *860. McCloskey, J., and C. F. FARWELL.** 422430. 1890.
Printers' ink for celluloid. Pigment, albumen, glycerin, and a gum resin.
- *861. Holt, O. G.** 424556. 1890.
Printers' and lithographic ink. Residue of petroleum.
- *862. Holt, O. G.** 424557. 1890.
Printers' and lithographic ink. Petroleum residue, gums, pigment.
- 863. Schiffmann, J.** 428146. 1890.
Indelible violet anilin ink. Slow oxidation of mixture of anilin oil and hydrochloric acid, and a dissolving violet color.
- 864. Fuerth, W. G.** 437588. 1890.
Condensed ink. Vaseline, fatty substance, and color.
- *865. Higgins, C. M.** 437780-81. 1890.
Printers' or stamping ink. Oleic acid, essential oil and color. Essential oil in which is dissolved anilin green.
- 866. Simpson, D. C.** 442463. 1890.
Composition for fixing ink. Soluble acetate of lead, potassium chlorate, and copper acetate.
- 867. Oliphant, D. S.** 443375. 1890.
Marking ink.
- 868. Watson, E.** 458741. 1891.
Drawing and marking ink. Coal tar and sulphuric acid at a temperature not over 200° F, washing out the acid, and treating with alkali.

Patents — United States, continued.

- 869. Surby, R. W.** 459691. 1891.
Fluid for rendering oil paint indelible.
- 870. Just, T. W., and others.** 465860. 1891.
Writing ink. Carbon black, caustic soda, oxalic acid, india ink, vanadium, aleppo galls, nut galls, gum arabic, anilin, and water.
- *871. Higgins, C. M.** 483446-47. 1892.
Stamping and printers' ink. Fixed oil or fat, carbolic acid, and color. Also castor oil, oil of cassia or other essential oil.
- *872. Hoz, A.** 486873. 1892.
Ink for printing textiles.
- *873. Dorn, L.** 511292. 1893.
Machine for grinding printers' and lithographic ink.
- 874. Wexler, G., and E. NIENSTAEDT.** 517371. 1894.
Ink making device. Uses coil of absorbent cotton holding chemical ink.
- *875. Bibby, J., and J. BIBBY.** 519032. 1894.
Printers' ink. Cotton seed foots as a base.
- 876. Pope, W. M.** 521177. 1894.
Canceling and stamping ink. Rosin oil, lamp-black, rosin soap, coal tar acid.
- 877. Nienstaedt, E.** 523863. 1894.
Solid ink. Granules of hard non-porous matter covered with a layer of dry ink.
- 878. Sharp, S. H.** 551327. 1895.
Branding liquid for stencil printing.
- 879. Lewis, H. J., and S. L. BELLMAN.** 574437. 1897.
Ink for writing on blueprints. Solid acid oxalate and neutral carbonate of an alkali mixed to give neutral reaction to test paper.
- *880. Ogilvy, D. J.** 587852. 1897.
Printers' ink. Black pigment, oil or oils, and resinous substances subjected to injected steam.
- 881. Dunlap, L. E.** 590139. 1897.
Effervescent ink, using combination of acid and alkali.
- *882. Hall, F. B.** 606542. 1898.
Printers' ink. Water, sugar, gum arabic, salicylic acid, color, and glycerin.
- 883. Ngaire, H. G.** 614544. 1898.
Branding composition.
- 884. Lichtentag, I., and A. LICHTENTAG.** 614734. 1898.
Writing ink. Process of suspending carbon in water by means of soap.
- *885. Eschenbach, A. C., and L. SIELKE.** 615613. 1898.
Ink for printing on tobacco or cigars.
- 886. Canode, F. B.** 617315. 1899.
Stencil ink. German green soap, glycerin or glucose, and a pigment.
- 887. Hochstetter, R. W.** 619889. 1899.
Canceling ink. Nigrosine dissolved in oleic acid, and diluted with a non-drying oil.
- 888. Scott, H. W.** 629526. 1899.
Branding liquid.
- 889. Klein, E.** 646122. 1900.
Ink for marking cigars and tobacco. Lanolin and a pigment.
- 890. Kretschmann, E.** 650901. 1900.
Sympathetic ink for coating paper.
- *891. Ogilvy, D. J.** 657179. 1900.
Printers' ink. Heats pigment and vehicle, agitates mass while temperature is maintained, and strains in heated condition.
- *892. Schepp, J. J.** 669552. 1901.
Composition for adding to lithographic ink. Tallow, lard, beeswax, oil of lavender, and starch.
- 893. Millison, B.** 671972. 1901.
Stamping ink. Castile soap, pigment, and glycerin.
- 894. Kretschmann, E.** 673400. 1901.
Sympathetic ink for coating paper.
- 895. Lawton, E. P.** 690862. 1902.
J.S.C.I., 1902, v. 21, p. 250.
Copying ink. Nutgalls, ferrous sulphate, sugar, chloride of ammonia; also carbolic acid.
- *896. Adelsberger, J., and H. FRIEDMANN.** 710233. 1902.
Lithographic ink. Varnish, glycerin, alkaline salt, tartar, and resinous oil.
- *897. Wass, A. G.** 716318. 1902.
J.S.C.I., 1903, v. 22, p. 103.
Printers' ink and varnish, using heavy mineral oil and rosin.
- 898. Spohn, H. H.** 719623. 1903.
J.S.C.I., 1903, v. 22, p. 293.
Chemical and wash proof ink. Prussian blue, tannin, anilin dye, carbolic acid.
- 899. Brown, T. H., and J. E. STAPLES.** 720779. 1903.
Branding fluid.
- *900. Fisher, F.** 730897. 1903.
Printers' ink reducer. Varnish, copaiba balsam, japan drier, sweet oil, and citron oil.
- 901. Spohn, H. H.** 741734. 1903.
Marking and stamping ink. Nigrosine base, toluidin, rosin oil, tar.
- 901a. Chapin, M. H.** 749684. 1904.
Mon. sc. B., 1905, série 4, v. 19, p. 16.
Paper and method of making same for obtaining fast copies from writings in anilin inks.
- 902. Pope, W. C.** 751554. 1904.
Effervescent ink tablet. Effervescent base, oxalic acid, bicarbonate of soda, sodium chloride, acacia, and color.
- 903. Spohn, H. H.** 769774. 1904.
Canceling ink. Water soluble color base, acid soap, and non-drying oil; also lampblack and carbon black, and kerosene, with process.
- 904. Schwarzschild, S.** 822556. 1906.
Safety writing ink. Hydroxide of alkali metal, an iodide, a nitrite, and a weak acid.
- *905. Friedmann, H.** 824475. 1906.
Adaptation of ordinary printing inks to lithographic printing.
- 906. Wenner, M. C.** 834955. 1906.
Marking ink for embroidery. Paraffin, ultramarine blue, chalk, prussian blue, cream of tartar.
- *906a. Homolka, B., and J. ERBER.** 839590. 1906.
Compound of organic colors with fatty acids for printers' ink base. Process for dissolving sebatas and oleates in water.

Patents — United States, continued.

*907. Klein, E. 841156. 1907.

J.S.C.I., 1907, v. 26, p. 421.

Printers' ink. Incombustible substance retaining its appearance under influence of 400° C., and a mixture of fatty matters, or a volatile oil.

908. Morpurgo, G. 849413. 1907.

Sizing or finishing media from starch.

*909. Fireman, P. 857044. 1907.

Printers' ink pigments. Process of precipitating black ferro-ferric oxide.

910. Meyer, O. 866293. 1907.

Sympathetic ink for coating paper.

911. Hauser, J. 875174. 1907.

Branding or marking composition.

*912. McMaster, M. E. 877219. 1908.

C. A., 1908, v. 2, p. 1502.

Printers' ink which will not "print back." Uses milk.

912a. Nowalk, R. F. 878662. 1908.

Lange, v. 3, p. 232; C. A., 1908, v. 2, p. 1753.

Ink remover.

913. Thomas, B. R. 878689. 1908.

Lange, v. 3, p. 232; C. A., 1908, v. 2, p. 1753.

Ink remover. Oil, alcohol, glycerin, and acid.

914. Mayer, A. R. 878817. 1908.

C. A., 1908, v. 2, p. 1753.

Ink remover for tracing cloth. Sweet spirit of niter, hydrogen peroxide.

915. Gallagher, J. R. 895248. 1908.

Renewing process for printing ribbons.

*916. Potter, H. N. 908132-33. 1908.

J.S.C.I., 1909, v. 28, p. 151.

Printers' ink using silicon oxide.

917. Pellew, C. E. 911327. 1909.

Stencil ink. Basic color, volatile organic acid, tannin, and gummy matter.

*918. Pignone, E. 918903. 1909.

Printers' transfer ink. Zinc white, antimony trisulphide, baking powder, starch, tartaric acid, sodium bicarbonate, varnish, rosin, coal tar naphtha, and turpentine.

918a. Wild, C., Jr. 919410. 1909.

C. A., 1909, v. 3, p. 1818.

Indelible marking pencil. Paraffin, printers' ink and lampblack.

919. Hochstetter, R. 928450. 1909.

J.S.C.I., 1909, v. 28, p. 879.

Ink for stencil sheets. Pigment ground in glycerin and sulphonated oil.

920. Hochstetter, R. 928915. 1909.

J.S.C.I., 1909, v. 28, p. 880.

Mimeograph ink. Pigment ground in glycerin and sulphonated oil.

*921. Charles, P., and S. FAUJAT.

929913. 1909.

Intaglio ink. Gelatine base, water, color, and fatty constituent.

*922. Hopkins, M. S., and C. R. BARNETT.
932470, 932548, 932549, 932550. 1909.

J.S.C.I., 1909, v. 28, p. 1049; C. A., 1909, v. 3, p. 2632-2633.

Apparatus for recovery of ingredients of oily ink.

923. Whitty, G. S. 953110. 1910.

Stencil ink. Coloring matter, an aldehyde, salt, glycerin, and adhesive.

923a. Weinberg, S. 959185. 1910.

Mon. sc. B., 1911, série 5, v. 1-2, p. 118.

Ink for stamping pads. Zinc white, glycerin, gum arabic, shellac, borax, water.

924. Farup, P. 966815. 1910.

Coloring matter from titaniferous iron minerals.

925. Fuerth, W. G. 970439. 1910.

C. A., 1910, v. 4, p. 3306.

Stencil ink. Water, glycerin, soap, and magnesium carbonate.

926. Kasseker, J. 971280. 1910.

J.S.C.I., 1910, v. 29, p. 1206; C. A., 1910, v. 4, p. 3289.

Ink for ceramic transfers. Non-drying thinning liquid, and linseed oil saturated with a lead compound.

927. Morse, C. F. 979542. 1910.

J.S.C.I., 1911, v. 30, p. 141; C. A., 1911, v. 5, p. 1000.

Transfer ink. Color, glucose, corn syrup, and glycerin, with process for same.

928. Stockmann, M. F. C. 987926. 1911.

Ink to produce raised characters for the blind.

*929. Henkel, H., and O. GESSLER.

988874. 1911.

C. A., 1911, v. 5, p. 2176; Mon. sc. B., 1912, série 5, v. 2, p. 30.

Removing printers' ink from paper.

*930. Meixell, W. B. 989023. 1911.

C. A., 1911, v. 5, p. 2176.

De-inking process, using whitening.

931. Collinson, R. W., and C. W. COLLINSON.

993348. 1911.

Branding composition.

932. De Lanoy, H. N. 994724. 1911.

Ink stick.

*932a. Henderson, C. 996642. 1911.

C. A., 1911, v. 5, p. 2744.

Removing offset ink from press. Uses atomized jets.

932b. Ellis, C. 997910. 1911.

C. A., 1911, v. 5, p. 2979.

Composition for erasing ink from tracing paper.

*932c. Walker, F. H., and C. E. SOHN.

999611. 1911.

C. A., 1911, v. 5, p. 3173; Mon. sc. B., 1912, série 5, v. 2, p. 63.

Printers' ink from mineral oil residuum.

*932d. Ramage, A. S. 1004078. 1912.

C. A., 1912, v. 6, p. 302; Mon. sc. B., 1912, série 5, v. 2, p. 159.

Printers' ink. Stearate or oleate, chrome yellow, linseed oil.

Patents — United States, continued.

- 933. Bonser, J. E.** 1008779. 1911.
Ink remover.
- 934. Fuerth, W. C.** 1013544. 1912.
J.S.C.I., 1912, v. 31, p. 140; C. A., 1912, v. 6, p. 688.
Stencil ink. Acetated glycerin, rapeseed oil, dextrin, zinc oxide, barium sulphate, and color.
- *935. Hopkins, M. S.** 1021737-38. 1912.
J.S.C.I., 1912, v. 31, p. 444.
Recovery of oily ink from cloths.
- 936. Goldberg, H. E.** 1034103-04. 1912.
J.S.C.I., 1912, v. 31, p. 784; C. A., 1912, v. 6, p. 2676.
Electrically conducting writing ink. Deflocculated graphite and a volatile liquid.
- 937. Patten, W. D.** 1035229. 1912.
C. A., 1912, v. 6, p. 3333.
Writing ink, using aluminate of soda and phosphoric acid.
- 938. Schmitt, C. A.** 1050236. 1913.
C. A., 1913, v. 7, p. 871.
Stencil and stamping ink fixed on paper by addition of water.
- 939. Harrington, A. W., and others.** 1063791. 1913.
Composition for stencil sheets.
- *940. Putnam, F. A.** 1082099. 1913.
C. A., 1914, v. 8, p. 830.
Printers' ink. Water-repellent base dissolved in carbolic acid mixed with color.
- 941. Price, T. M.** 1088840. 1914.
J.S.C.I., 1914, v. 33, p. 429; C. A., 1912, v. 6, p. 293; 1914, v. 8, p. 1515.
Finger-print ink. Fat solid at 35° C., color, glycerin, and carbon.
- *942. Wolff, M.** 1094288. 1914.
J.S.C.I., 1914, v. 33, p. 557.
Printers' ink. Partly carbonized fibrous vegetable material, alkaline silicate, oil, and color.
- *943. Schuetze, L., and R. FISCHER.** 1096198. 1914.
C. A., 1914, v. 8, p. 2228.
Printers' ink, using albumin.
- *944. Krapf, E. F.** 1097981. 1914.
J.S.C.I., 1914, v. 33, p. 798.
Printers' luminous ink. Colloidal material impregnated with radio-active substances.
- 945. Gibson, W. H.** 1101795. 1914.
Branding composition.
- *946. Hochstetter, R.** 1119960. 1914.
J.S.C.I., 1915, v. 34, p. 92; C. A., 1915, v. 9, p. 248.
Printers' ink and apparatus. Mixes pulp color with varnish in partial vacuum, at same time subjecting ink to a temperature adapted to vaporize the moisture, and drawing off vapor as it is formed.
- *946a. Walker, A. B., and F. P. WALKER.** 1131578. 1915.
Lithographic ink varnish based on aluminum soap.
- *947. Cline, M., and C. F. RHODES.** 1138085. 1915.
Ink remover for paper stock.
- 947a. Oppenheim, S. R.** 1141482. 1915.
Vegetable black from sea-weed.
- *948. Posse, G. E.** 1142365. 1915.
Ink for intaglio or photogravure. Casein, alkali salts, sulphonated oils with lake colors, carbon black, mineral dyestuffs, ethereal oils, and water.
- *948a. Lipsius, S.** 1146182. 1915.
Relief engraving ink. Glycerin or dextrine and an improved fusible shellac gum.
- 949. Nienstadt, A. E.** 1155676. 1915.
Color cartridge for ink wells.
- *949a. Gessler, A. E.** 1157525. 1915.
Disazo dyes for printers' inks.
- *949b. Lipsius, S.** 1158065. 1915.
Relief engraving ink. Linseed oil (or rosin) and oily agent, with shellac.
- 950. Hochstetter, R.** 1158131. 1915.
J.S.C.I., 1915, v. 34, p. 1217.
Mimeograph ink. Pigment ground in oil.
- 950a. Beatty, W. A.** 1158962. 1915.
Gum adapted to the making of indelible and marking inks.
- 951. Mossman, J.** 1159857. 1915.
Transfer marking ink for embroidery fabrics or sheets. Color, linseed oil, beeswax, and turpentine.
- *952. Bullinger, C. J.** 1162027. 1915.
Ink for printing on cloth in easily removable characters. Gelatine, glue, water, zinc white, glycerin, thymol.
- *953. Turkin, N. W.** 1164036. 1915.
J.S.C.I., 1916, v. 35, p. 130.
Manufacture of printing colors. Colloidal solution of color pigment, alizarin oil, varnish, animal fatty substance, and liquid solvent.
- *953a. Blangey, L.** 1166808. 1916.
Yellow printers' and litho inks based on compounds containing poly-atomic group containing oxygen and less than 4 atoms when mixed with metal compound as substratum.
- *953b. Scholz, P. J. A.** 1167939. 1916.
Ink for making relief printing surfaces.
- 953c. Jorgenson, H.** 1170273. 1916.
Finger print ink.
- *953d. Ellis, C.** 1179414. 1916.
J.S.C.I., 1916, v. 35, p. 642.
Thickening of printers' ink oils by ultraviolet light.
- *953e. Ellis, C.** 1180025. 1916.
J.S.C.I., 1916, v. 35, p. 642.
Thickened oil product for printers' inks, using ultraviolet rays.
- *953f. Lilienfeld, L.** 1188376. 1916.
J.S.C.I., 1916, v. 35, p. 887.
Alkyl ethers of cellulose for printers' inks and thickeners.
- 953g. Waite, E. E.** 1188588. 1916.
Aluminium ink for marking brake linings.
- 954. Kaelble, K.** 1194743. 1916.
Transfer ink. Water, finely divided pigment, and a non-pigment binder.

Patents — United States, continued.

955. **Pickering, O. W.** 1195604. 1916.
J.S.C.I., 1916, v. 35, p. 1026.
Aluminous pigment.
956. **Schrader, A.** 1195612. 1916.
Acid and water-proof ink. Silesian soluble blue, oxalic acid, nigrosin, india ink, and water.
957. **Hochstetter, R.** 1198440. 1916.
J.S.C.I., 1916, v. 35, p. 1123.
Black mimeograph ink. Carbon black, mineral oil, and a sulphonated oil.
958. **Hochstetter, R.** 1198441. 1916.
J.S.C.I., 1916, v. 35, p. 1123.
Colored mimeograph ink. Colored pigment or lake color in a mineral oil, and turkey-red oil.
959. **Hochstetter, R.** 1198442. 1916.
J.S.C.I., 1916, v. 35, p. 1123.
Mimeograph ink. Dyestuff in alcohol, mineral oil, turkey-red oil.
- *960. **Acheson, E. G.** 1201994. 1916.
J.S.C.I., 1916, v. 35, p. 1226.
Printers' ink. Deflocculated or non-deflocculated pigment particles associated with a vehicle, with process.
- *961. **Putnam, F. A.** 1203779. 1916.
J.S.C.I., 1916, v. 35, p. 1267.
Printers' ink. Gum in oil, metallic color, and non-metallic color.
- *962. **Rogers, A.** 1224668. 1917.
J.S.C.I., 1917, v. 36, p. 724.
Printers' ink. Asphalt base, petroleum residue, thinning oil, rosin, and pigment.
963. **Wright, I. J.** 1226735. 1917.
J.S.C.I., 1917, v. 36, p. 708.
Ink removing compound.
964. **Hochstetter, R.** 1226884. 1917.
J.S.C.I., 1917, v. 36, p. 894.
Mimeograph ink. Pigment, sulphonated oil, glycerin, and a gum varnish.
965. **Sullivan, F. R.** 1228259. 1917.
Writing ink. Transparent gloss varnish, white chalk, turpentine, and saffraas oil.
- *966. **Billings, W. T.** 1233962. 1917.
Medicated printers' ink. Nutgalls, fir balsam, extract of hemlock, beeswax, balsam pine, carbolated vaseline, printers' varnish and oil.
- *967. **Baumgardner, F. J.** 1234264. 1917.
Printers' ink. Ground oyster shells, varnish, color.
- *968. **Woolley, G. C.** 1237136. 1917.
Printers' ink. Aluminium salt of a fatty acid, hydrocarbon oil, and pigment.
969. **Ohashi, H.** 1238188. 1920.
Carbon paper and ink.
- *970. **Werst, J. J.** 1249575. 1917.
J.S.C.I., 1918, v. 37, p. 86a.
Process of separating impurities from waste fibrous materials.
- 970a. **Mott, W. R.** 1259121. 1918.
J.S.C.I., 1918, v. 37, p. 313a.
Manufacture of lampblack.
- *970b. **Franche, C. E.** 1259505. 1918.
Adapts printers' ink to coloring electric light bulbs.
- 970c. **Alexander, J.** 1259708. 1918.
J.S.C.I., 1919, v. 38, p. 263a.
Process of producing matter in a finely divided state, using a "colloid protector."
- *971. **Baumgardner, F. J.** 1259713. 1918.
"Non-skin" printers' ink. Mineral oil, asphaltum, and pigment; compounded by the "cold process."
- 971a. **Lewis, G. C.** 1263082. 1918.
J.S.C.I., 1918, v. 37, p. 383a.
Process for increasing miscibility of carbon black or of lampblack.
- *971b. **Ogilvy, D. J.** 1268142. 1918.
J.S.C.I., 1918, v. 37, p. 520a.
Carbon pigments for printers' inks.
- *971c. **Morris, P., and J. O. BRYANT.** 1269487. 1918.
Adapts ordinary writing ink to the making of a safety printers' ink.
- *972. **Rackle, C. H.** 1272092. 1918.
Smut-preventing composition for printers' ink. Tal-low, varnish, starch, paraffin oil, oil of citronella.
- *973. **Haas, W. N., and H. C. YOUNG.** 1273361. 1918.
Reducer for printers' ink. Petrolatum, magnesium carbonate, and sodium silicate.
- *973a. **Baumgardner, F. J.** 1276861. 1918.
J.S.C.I., 1919, v. 38, p. 22a.
Printing colors, substituting finely ground oyster shells for aluminium hydrate.
974. **Shinozaki, M.** 1282302. 1918.
J.S.C.I., 1919, v. 38, p. 22a.
Writing ink. Carbonaceous substance dissolved in caustic alkali, a dyestuff, lampblack, and soft soap.
- *975. **Barton, L. E., and H. A. GARDNER.** 1283455. 1918.
J.S.C.I., 1919, v. 38, p. 46a.
Printers' ink based on titanitic acid.
- *975a. **Barton, L. E., and H. A. GARDNER.** 1286916. 1918.
J.S.C.I., 1919, v. 38, p. 151a.
Lake pigments based on titanitic oxide.
976. **Jeanmaire, L.** 1289793. 1918.
Indelible ink. Logwood, potassium bichromate, alum, nut galls, gum arabic, sodium carbonate, nitrate of silver, water.
977. **Schmidt, E. E.** 1296858. 1919.
Safety writing ink. Ferro-cyanide of iron, oxalic acid, epsom salts, turkey-red oil, water.
- 977a. **Lane, G.** 1300178. 1919.
Ink for titles on moving picture films. Adds cottonseed oil and citronella oil to printing ink.
978. **Kruse, H., and W. C. KRUSE.** 1309292. 1919.
Mimeograph ink. Turkey-red oil, glycerin, lake on alumina hydrate base, and alumina hydrate.
- *979. **Byrne, P. S.** 1316531. 1919.
To prevent smut of printers' ink.
980. **Luscher, L. W.** 1320631. 1919.
Indelible ink. Asphaltum, a solvent, anilin oil, methyl salicylate.
981. **Akashi, K.** 1325971. 1919.
J.S.C.I., 1920, v. 39, p. 165a.
Solid ink. Soluble dye, dextrin, gum tragacanth, thymol, lactic acid, water.

Patents—United States, continued.

- *981a. Ohashi, H. 1328188. 1920.
J.S.C.I., 1920, v. 39, p. 264a.
Carbon paper and ink. Soluble anilin dye, calcium chloride, emulsifier, and emulsifiable substance.
- *981b. Leitner, E. 1329088. 1920.
Ink for metal printing plates. Printers' ink and tar oil.
- *982. Tsutsumi, M. 1334722. 1920.
Solid ink. Extracts of logwood and galls, sodium salicylate, potassium ferrous tartrate, gum arabic, and a water soluble dye.
- *982a. Dixon, W. H. 1341012. 1920.
Match ignition printing composition. Copal varnish, alumina, peroxide of lead, amorphous phosphorus, turpentine.
- *983. McMurray, S. M. 1342638. 1920.
Pigment for smear-proofing.
- *983a. Little, C. H. 1343978. 1920.
Non-clogging drawing ink, for use on transparent paper or tracing cloth. Based on vanadium salt.
- *984. Goodworth, E. 1347454. 1920.
Writing and engrossing ink. Soluble blue, mild alkali, and a dye assisting agent.
- *985. Carvalho, D. N. 1353720. 1920.
Safety composition to be applied to writing.
- *986. Heidorf, C. J. 1358151. 1920.
Binding composition for printing wall paper.
- *987. Cushman, A. S. 1361833. 1920.
Ink remover. Dilute potassium permanganate solution, oxalic acid, with addition of hydrogen peroxide.
- *988. Olsen, J. C. 1364406. 1921.
Ink stick.
- *988a. Yoshizawa, T. 1365760. 1921.
Non-corrosive ink. Adds borax and dextrin to ordinary ink.
- *988b. Marbury, R. E. 1373012. 1921.
Electrically resisting ink using titanium carbide.
- *988c. Horwitz, A. 1373886. 1921.
J.S.C.I., 1921, v. 40, p. 358a.
Neutralized sulphonated resin for printers' ink.
- *988d. Randel, F. L. 1374607. 1921.
J.S.C.I., 1921, v. 40, p. 397a.
Sulphated oils for printing and typewriter inks.
- *989. Kruse, H., and W. C. KRUSE.
1381648. 1921.
Stencil ink. Alumina black base, glycerin, and turkey-red oil.
- *990. Barmier, H. A. 1383512. 1921.
Printers' ink. Gilsonite, fuel oil, and color.
- *990a. Feran, R. L. 1388418. 1921.
Prevents "offset" of printers' ink by rapid drying with ozone.
- *991. Kruse, H. 1393142. 1921.
Transfer ink, using stearin pitch.
- *991a. Marr, R. A. 1396227. 1921.
J.S.C.I., 1922, v. 41, p. 10a.
De-inking process.
- *992. Porter, J. J. 1402442. 1922.
Sympathetic ink.
- *993. Dales, B. 1404345. 1922.
Printers' ink. Algin and glycerin.
- *994. Evans, W. W., and B. DALES.
1404355. 1922.
Printers' ink. Glycerin, syrup, water solution of glue, and a pigment.
- *995. Ghegan, H. G. 1406183. 1922.
Cleaning solvent for printers' ink. Kerosene and alcohol.
- *996. Fitzgerald, F. C. 1406837. 1922.
Lange, v. 3, p. 205.
Additive for lithographic ink. Glycerol, calcium chloride, potassium phosphate, carbolic acid, and liquid gum.
- *997. Holmes, H. N., and D. H. CAMERON.
1410012. 1922.
J.S.C.I., 1922, v. 41, p. 335a.
Printers' or lithographic ink. Process for emulsion of the "water-in-oil" type.
- *998. Ishida, K. 1410572. 1922.
Printers' ink. Color, mineral oil, resin, soluble silicate, water insoluble soap, catechu, gum arabic, and formaldehyde.
- *999. Schmidt, E. E. 1420289. 1922.
Marking, printing, and safety ink. Nigrosine, mirbane, carbolic acid, turkey-red oil.
- *999a. Fireman, P. 1420985. 1922.
J.S.C.I., 1922, v. 41, p. 639a.
Preparation of ferric oxide for dark brown printers' pigments.
- *1000. Buck, H. A. 1421125. 1922.
J.S.C.I., 1922, v. 41, p. 639a.
Non-inflammable printers' ink. Binder of shellac, borax, and water.
- *1001. Eylich, H. R., and J. A. SCHREIBER.
1421195. 1922.
J.S.C.I., 1922, v. 41, p. 628a.
De-inking process.
1002. Schiffmann, J. 1421728. 1922.
J.S.C.I., 1922, v. 41, p. 640a.
Indestructible black stamp dye.
1003. Garvey, E. S. 1422957. 1922.
Waterproof ink for metals. Anilin dye, alcohol, shellac.
1004. Morse, C. F. 1423246. 1922.
J.S.C.I., 1922, v. 41, p. 677a.
Invisible ink. Basic ferric sulphate and phosphoric acid.
- *1004a. Jespersen, T. 1424411. 1922.
J.S.C.I., 1922, v. 41, p. 748a.
De-inking process.
1005. Glass, C. F. 1429338. 1922.
Finger-print ink. Asphaltum, flour, talc powder, and silicon.
- *1005a. Holmes, H. N., and D. H. CAMERON.
1429430. 1922.
"Water-in-oil" emulsion for printing and lithographic inks.
- *1005b. Buckman, H. H. 1429841. 1922.
J.S.C.I., 1922, v. 41, p. 868a.
Preparation of titanium compounds for printers' inks.
- *1005c. Acheson, G. W. 1431079. 1922.
J.S.C.I., 1922, v. 41, p. 906a.
Process of preparing pigment-oil-water emulsions.

Patents—United States, continued.

- *1006. **Brenizer, G. W.,** and **C. C. HUTSON.**
1436856. 1922.

Printers' ink. Yellow dextrin, sodium bicarbonate, pigment, and water.

1007. **Dick, A. B.,** and **E. W. HILL.**
1439356. 1922.

Stencil ink. Color, sulphonated oil, rosin oil, soap, alumina phosphate.

1008. **Shinozaki, M.** 1439489. 1922.

Copying ink. Hydrochloric acid, methyl violet, and funori.

- *1009. **Farkas, L. L.** 1439623. 1922.

Anti-smearing composition. Precipitated chalk, zinc oxide, barium sulphate, and rapeseed oil.

1010. **Balser, J. W.** 1439658. 1922.

Writing ink. Carbolic acid, denatured alcohol, water, sugar, and dye.

- *1011. **Doughty, H. W.** 1439695-96. 1922.

J.S.C.I., 1923, v. 42, p. 1032a.

Metallic ink for book-binders. Metallic pigment, benzyl alcohol, benzoin, canada balsam, benzyl acetate.

1012. **Cross, R.** 1441664. 1923.

Indelible ink. Water, prussian blue, oxalic acid, methylene blue, and ammonium molybdate.

- *1013. **Schwenterley, A.** 1447734. 1923.

Rotogravure ink. Petroleum product and carbon tetrachloride.

1014. **Snelling, W. O.** 1449067. 1923.

J.S.C.I., 1923, v. 42, p. 464a.

Process of making pigments of sub-microscopic size. p-aminophenol chloride, anilin chloride, p-aminophenol, ammonium tannate (and gallo tannate), anilin black.

1015. **Hilton, R. W.** 1449943. 1923.

J.S.C.I., 1923, v. 42, p. 464a.

Duplicating machine ink. Color, alkaline salt of a sulphonated oil, tri-methylene glycol, aluminum hydroxide.

- *1016. **McElroy, W. J.,** and **J. CLARKE.**
1450692. 1923.

Metallic printers' ink. 1: Coumaron resin, terpeneol, rosin oil, and metallic pigment. 2: Non-acid synthetic resin, non-acid solvent, and metallic pigment.

1017. **Kruse, H.,** and **W. C. KRUSE.**
1464944. 1923.

Stencil ink. Turkey-red oil and ground carbon.

- *1018. **Herbein, G. W.** 1469414. 1923.

Printers' ink. Fusel oil, rosin, copper nitrate, calcium chloride, sodium hydrate, sodium silicate, lineolate of lead, pigment, drier, and water.

- *1019. **McElroy, W. J.,** and **J. CLARKE.**
1471746. 1923.

Printers' ink. Neutral vehicle for pigments.

1020. **Dement, R. R.** 1471884. 1923.

Ink for drawing designs. Carbonate, pigment, and gum acacia.

1021. **Goldsmith, B. B.** 1472063-65. 1923.

Ink cartridge.

1022. **Goldsmith, B. B.** 1472067. 1923.

Ink cartridge.

1023. **Goldsmith, B. B.** 1473700. 1923.

Ink cartridge.

1024. **Coppon, T. W.** 1475932. 1923.

Ink remover. Alkali hypochlorite, decolorizing of resulting product, and treating with alkali phosphate.

- *1024a. **Mock, W. W.** 1479047. 1924.

Gritless printers' ink. Carbon and lubricating oil under centrifugal action.

1025. **Cooney, F. B.** 1479533. 1924.

Ink paste. Gallic acid, ferrous sulphate, hydrochloric acid, carbolic acid, glycerin, indigotin.

1026. **Marston, T.,** and **W. S. LAWRENCE.**
1487873. 1924.

Transfer indelible ink, using stearic acid and an indulin base.

- 1026a. **Jackson, F. E.** 1488881. 1924.

Composition for removing india ink from drawing and tracing paper.

- *1027. **McElroy, W. J.** 1489356-57. 1924.

Printers' metallic ink.

- 1027a. **Hale, A. B.** 1492454. 1924.

Ink for marking fruit, using paraffin base.

1028. **Bock, A. C. O.** 1497971-72. 1924.

Finger-print ink. White resin, and color, fixed by heat.

- 1028a. **Reitze, E.,** and **E. TRUJILLO.**
1506082. 1924.

Finger-print ink for documents. Glycerin, gelatin, alcohol, and powdered color.

- *1028b. **Imhof, J.** 1507358. 1924.

Printers' ink with colors that are developed after printing.

GREAT BRITAIN

The Library has complete specifications and classified abridgments.

1029. **Holman, C.** 258. 1688.

"A certain powder, which being put into faire water, beer, ale, or wine, doth immediately turn into very good black writing ink."

- *1030. **Bahre, J.** 702. 1755.

Printers' ink for textiles and paper in gold, silver, and brocade colors. Several recipes.

1031. **Cummings, G.** 809. 1764.

Repertory, 1797, v. 7, p. 231.

Delible writing surface. White lead, plaster of paris, lime, water, size, linseed oil varnish, with colors if desired.

1032. **Dring, J.** 906. 1768.

Solid ink. Sweet oil, vinegar, galls, copperas, gum arabic, alum.

- *1033. **Rowley, J.** 1012. 1772.

Playing card ink. Linseed oil and alum instead of water.

1034. **Watt, J.** 1244. 1780.

Repertory, 1794, v. 1, p. 13.

Copying ink. Water, galls, green copperas or green vitriol, gum arabic, and roach alum.

Patents—Great Britain, continued.

- *1035. **Koops, M.** 2392. 1800.
Repertory, 1801, v. 14, p. 225.
De-inking process.
- *1036. **Senefelder, J. A.** 2518. 1801.
Process of lithography with recipes for inks.
1037. **Foelsch, F. B., and W. HOWARD.**
3214. 1809.
Repertory, 1809, series 2, v. 15, p. 206.
Ink for copying paper. Frankfort black and butter ground smooth.
- *1038. **Martin, T., and C. GRAFTON.**
4601. 1821.
Repertory, 1823, series 2, v. 43, p. 257;
Lond. jour., 1822, v. 4, p. 73.
Spirit-black as a substitute for lampblack in printers' ink.
1039. **Smith, J., and W. DOLIER.** 6182. 1831.
Repertory, 1832, series 3, v. 13, p. 332;
Lond. jour., conjoined series, 1832, v. 1, p. 419.
Copying ink. Gum arabic, lampblack, and water.
- *1040. **Leggett, H. H.** 6515. 1833.
Lond. jour., 1841, conjoined series, v. 17, p. 377.
Printers' colored ink. Logwood and acetate of copper with colors.
1041. **Dunkin, T.** 6831. 1835.
Lond. jour., conjoined series, 1836, v. 7, p. 218.
Copying ink. Adds sugar candy and deliquescent salt to ordinary writing ink. For black lines, sulphate of iron, gall nuts, sugar candy, and lampblack.
- *1042. **Bird, J.** 6906. 1835.
Repertory, 1836, new series, v. 5, p. 363.
Mineral earth as a pigment for printers' ink.
1043. **Aldrich, H. N.** 7341. 1837.
Rendering certain colors adaptable to writing.
1044. **Stephens, H., and E. NASH.**
7342. 1837.
Repertory, 1839, new series, v. 11, p. 50, 58; Lond. jour., 1839, conjoined series, v. 13, p. 207.
Improvements in the manufacture of coloring materials.
1045. **Whitfield, R.** 7474. 1837.
Repertory, 1838, new series, v. 10, p. 41;
Lond. jour., 1838, conjoined series, v. 12, p. 146.
Indelible ink.
1046. **Normandy, A. R.** 8175. 1839.
Repertory, 1839, new series, v. 12, p. 237;
Lond. jour., 1840, conjoined series, v. 16, p. 138.
Process for superseding nut-galls; for treating campeachy wood; for chinese blue; for production of solid, semi-solid, and soluble ink.
- *1047. **Poole, M.** 8633. 1840.
Mec. mag., 1841, v. 34, p. 251.
Printers' ink for use on instruction sheets for writing pupils.
1048. **Scott, H.** 8770. 1840.
Repertory, 1841, new series, v. 16, p. 109;
Lond. jour., 1843, conjoined series, v. 21, p. 26; Mec. mag., 1841, v. 35, p. 60.
Writing ink based on nitrate of iron and gas black.
1049. **Roberts, M. J.** 9667. 1843.
Improvements in the composition of ink. No specification.
1050. **Mackenzie, G. T.** 10329. 1844.
Lond. jour., 1846, conjoined series, v. 27, p. 26.
Fluid to be used with copy paper. Permuriate of iron or other per salts. Also two recipes for black indelible ink.
1051. **Reade, J. B.** 11474. 1846.
Several recipes for writing inks.
- *1052. **Pratt, G. W.** 12226. 1848.
Repertory, 1849, enlarged series, v. 13, p. 185; Lond. jour., 1849, conjoined series, v. 34, p. 34; Mec. mag., 1849, v. 50, p. 116.
Resin oil as a substitute for linseed oil in printers' inks.
- *1053. **Fontaine Moreau, P. A. de.**
12342. 1848.
Printers' ink from refuse of vegetable wax and tallow.
- *1054. **Radley, W., and F. MEYER.**
13081. 1850.
Treatment of fatty, oleaginous, resinous, and cerous bodies to be used in printing inks.
- *1055. **Goodell, F.** 483. 1853.
Residue in distillation of resin oil as pigment for printers' ink.
- *1056. **Gwynne, J.** 1900. 1853.
Process of powdering coal for use in printers' ink.
- *1057. **Newton, A. V.** 1920. 1853.
Residue from distillation of resin oil for use in printers' ink.
- *1058. **Maumené, E. J.** 2343. 1853.
Black pigment from lignite for use in printers' ink.
1059. **Whitehouse, E. O. W.** 2885. 1853.
Telegraphic ink.
- *1060. **De Beauregard, F. A. T.** 945. 1854.
Printing, writing, and stamping inks. Potassium iodide, iodine, water, red chromate of potash, potassium cyanid, gum arabic.
- *1061. **Archer, C. M.** 1575. 1854.
De-inking process.
- *1062. **Livesey, J.** 32. 1855.
Printers' ink. Litho varnish, resin, and printers' ink.
1063. **Bellford, A. E. L.** 320. 1855.
Boils pieces of old leather with a caustic and treats with silica jelly.
1064. **Murdoch, J.** 531. 1855.
Ink for reducing or enlarging designs. Lampblack and molasses.
1065. **Dépierre, P.** 970. 1855.
Writing ink using decoction of alder flowers.
1066. **Wood, B.** 1676. 1855.
Non-corrosive ink. Carbonate of soda, water, citric acid, cochineal, alum.

Patents—Great Britain, continued.

- *1067. De la Rue, T. 1918. 1855.
Printers' ink based on borate of manganese.
1068. Swan, C., and G. F. SWAN. 342. 1856.
Writing and copying ink. Logwood, potassium bichromate, mercury perchloride, potassium subcarbonate, ammonia.
- *1069. Grant, F. D. 400. 1856.
Odoriferous printers' ink.
1070. Tolhausen, A. 717. 1856.
Ink pencils.
1071. Bufton, E. 738. 1856.
Writing ink using salts of platinum and silver.
- *1072. Morton, A. 842. 1856.
Inks for wall papers.
- *1073. Newton, W. E. 1130. 1856.
Thickening substances for inks to be used on fabrics and wall papers.
- *1074. Underwood, J., and V. BURT. 2206. 1856.
Wag. Jahr., 1857, Jahrg. 3, p. 388; Poly. Cent., 1858, Jahrg. 24, p. 426.
Copying printers' ink. Nutgalls, iron sulphate, gum senegal, treacle, soap, lampblack, prussian blue, water.
- *1075. Ernst, G., and W. LORBERG. 2507. 1856.
Ink for preparing etched printing surfaces.
- *1076. Bardot, H. N. D. 2845. 1856.
Thickening agent for printers' ink.
1077. Underwood, J. 1112. 1857.
Copying ink. Logwood extract treated with potassium chromate.
- *1078. Fleet, C. 1518. 1857.
Unalterable printers' ink based on green oxide of chromium.
1079. Henry, Michael. 1132. 1858.
Wag. Jahr., 1859, Jahrg. 5, p. 540; Lond. jour., 1859, new series, v. 9, p. 94.
Writing and copying inks using glycerin.
- *1080. Stuart, J. 1187. 1858.
Printers' ink pigment from asphalt residue.
1081. Winstone, B. 1996. 1858.
Copying and writing inks. Glycerin.
1082. Gresham, J. H. 2103. 1858.
Copying ink. Malt liquor, logwood, sugar, gall, iron sulphate, gum, cloves, and water.
1083. Dunn, A. 2316. 1858.
Solid marking ink. Powdered silver nitrate and black lead.
- *1084. Viette, P. A. 130. 1859.
Engraving and lithographic ink. Gutta percha, stearine, tallow.
1085. Moss, T. 348. 1859.
Safety ink for special paper. Clay and drying oils.
1086. Ballande, J. A. H. 861. 1859.
Writing ink. Oxides or metallic salts introduced into paper. Ink produces grey characters turning green. Gum water, prussiate of soda or of potash, hyposulphite of soda, etc.
- *1087. Hadfield, G. 1282. 1859.
Heating apparatus for thickening printers' inks.
1088. Barclay, R. 1390. 1859.
Safety inks for banknotes, checks, etc. Prussiates and sulpho-cyanids.
1089. Scoffern, J. 1744. 1859.
Writing ink using "copperized ammonia."
- *1090. Barre, J. B. H. H. R., and J. B. M. E. BARRE. 2024. 1859.
Lithographic transfer ink. Printers' mordant, printers' ink, copal oil, varnish.
- *1091. Collins, H. G. 2081. 1859.
Lithographic transfer ink. Tallow, soap, wax, gum mastic, shellac, and printers' ink.
- *1092. Palmer, J. R. 2399. 1859.
Printers' ink based on "black chromium."
1093. Gilbee, W. A. 2963. 1859.
Uses bark of *rhamus catharticus* as a substitute for chinese green in textile printing.
1094. Ballande, J. A. H. 388. 1860.
Colorless copying ink for prepared paper. Sodium hyposulphite and alum; or, sodium hyposulphite and a suitable alkali dissolved in water with thickener.
- *1095. Thierry, J. H. 1445. 1860.
For printers' ink uses residue from the distillation of schist.
- *1096. Lambert, B. 1633. 1860.
Recovery of color from printers' ink.
1097. Stevens, C. 2972. 1861.
Indelible anti-corrosive ink with anilin base.
- *1098. Brooman, R. A. 3107. 1861.
Printers' or lithographic ink. Fatty essence, printing varnish, copal varnish.
- *1099. Brooman, R. A. 640. 1862.
Lithographic ink. Uses transfer ink in which lithographic chalk has been ground, with addition of phosphoric acid.
1100. Clark, W. 675. 1862.
Colored writing inks. Anilin, water, alcohol, sugar or gum.
- *1101. Brooman, R. A. 767. 1862.
Printers' ink for glass, ceramic wares, and metallic surfaces. Borate, silicate, or phosphate capable of forming a paste with fatty acids or acid resins.
1102. Roberts, R. P. 1213. 1862.
Copying ink. Water, logwood, gum arabic, molasses, sugar candy, aleppo galls, bichloride of mercury, albeduchus, alcohol, and precipitate black.
1103. De la Rue, T. 2235. 1862.
Indelible writing ink. Gum tragacanth, glycerin, lampblack, salop, acetic acid, water, vinegar, gluten or isinglass. Another recipe uses black product of anilin.
- *1104. Prince, A. 2654. 1862.
Printers' ink. Petroleum substitute for linseed oil.
- *1105. Brooman, R. A. 2771. 1862.
Printers' transfer ink for dressing millstones.
1106. Croc, L. 3074. 1862.
Telegraphic ink. Anilin colors dissolved in bodies of the alcohol series, with addition of resins and waxes.
- *1107. Brooman, R. A. 488. 1863.
Transfer etching ink. Hydrofluoric acid.
- *1108. Rafter, H. 986. 1863.
Transfer ink for making electrotypes.
1109. Friedrich, G. W. E. 1418. 1863.
Acid-proof, color-changing, safety ink. Water, logwood, potassium bichromate, potassium ferrocyanide.

Patents—Great Britain, continued.

- *1110. McLean, J. 1564. 1863.
Printers' ink. Residue from distillation of shale oil.
1111. Goold, J. 1819. 1863.
Writing ink. Subjects a gallate or tannate of an alkali to action of metallic iron.
- *1112. Hughes, E. T. 3204. 1863.
Printers' safety ink. Peroxide of tin, chromium oxide, linseed oil, color.
- *1113. Zacherl, J. 226. 1864.
Ink for printing on paper previously saturated with insect-destroying solution.
- *1114. Gedge, W. E. 571. 1864.
Printers' ink for tin or tinned sheets. Mineral colors (especially lead compounds) and flux ground with lithargized drying oil and varnish.
- *1115. Day, B. 664. 1864.
Ink for preparing a printing surface on chalk. Glue, sugar, lampblack or colors.
- *1116. Green, W. 1354. 1864.
Process for making black pigments.
1117. Moeller, J. 1828. 1864.
Red ink. Madder, cochineal (or other red), alcohol, ether, salt, gum, alum.
1118. Baildon, H. C. 2223. 1864.
Safety ink. Sulphuric acid, indigo, anilin.
1119. Newton, W. E. 2506. 1864.
Writing ink. Aleppo galls, water, green sulphate of iron, gum arabic, cloves.
1120. Moeller, J. 2511. 1864.
Red writing and marking ink. Alizarin, potassium cyanid, etc.
- *1121. Rowley, J. 2854. 1864.
Printers' ink. Cotton oil, resin oil, lampblack.
- *1122. Hancock, C., and S. W. SILVER. 3093. 1864.
Printers' ink for unsized paper or partially sized textiles. Milk of balata or milk of caoutchouc. Also used as wall-paper ink.
- *1123. Hulot, A. A. 330. 1865.
Printers' ink. Non-fatty varnish from honey and glycerin.
- *1124. Brooman, R. A. 807. 1865.
Engraving and intaglio ink. Several recipes using gum arabic, india ink, acid, honey, garlic, water, starch, albumen, and red chalk.
1125. Newton, W. E. 836. 1865.
Process for filtering and introducing air.
- *1126. Scarratt, W., and W. DEAN. 1117. 1865.
For printing transfers or other surfaces in imitation of graining. Ochre, boiled oil, umber, beeswax, sugar of lead.
1127. Bonneville, H. A. 1846. 1865.
Copying ink. Nutgalls, gum arabic, iron sulphate, copper sulphate, sugar, alder wood.
1128. Ellis, H. 2267. 1865.
Use of silicates in non-corrosive writing and copying inks.
- *1129. Brooman, R. A. 2388. 1865.
Specification identical with no. 807 of 1865.
1130. Taylor, J. 2471. 1865.
Macerating pan.
- *1131. Holmes, S. 367. 1866.
Printers' ink. Bone oil pitch, naphtha, lampblack.
1132. Johnson, J. H. 1521. 1866.
Secret telegraphic ink.
- *1133. Holmes, S. 1737. 1866.
Printers' ink using bone pitch.
- *1134. Woodbury, W. B. 1918. 1866.
Printers' plastic ink for the Woodburytype. Transparent mixing oil color, mastic soap, and beeswax; or, water color, starch, etc.
- *1135. Petitdidier, F. 2719. 1866.
Improved method for printing in relief. Resin (as copal), solvent, drier, and color.
- *1136. Swan, J. W. 3303. 1866.
Printers' and lithographic ink. Prints are fixed by gelatinous ink containing chrome alum or soluble chromates or bichromates.
- *1137. Morvan, A. G. 71. 1867.
Transfer ink for photographic transfers. Asphalt, wax, and pitch dissolved in essence of lavender.
1138. Cooley, A. J. 106. 1867.
Ink powders from dried tinctorial extracts.
1139. Brooman, C. E. 181. 1867.
Telegraphic ink. Bitumen, wax, resin, and suet.
- *1140. Jameson, J. 2715. 1867.
Safety inks for banknotes, checks, etc. Several impressions each with a different kind of ink.
1141. McDermott, C. 977. 1868.
Marking ink pencil.
1142. Jameson, J. 1023. 1868.
Safety ink for banknotes, checks, etc., in connection with safety paper, using various recipes.
1143. Cooke, J. F. 2163. 1868.
Copying writing ink for use on dry paper. Substitutes for 20% to 50% of water in ordinary writing ink, an equal quantity of glycerin, or sugar, treacle, or calcium chloride.
- *1144. Hodge, P. R., and W. HODGE. 2578. 1868.
Improvements in manufacture of brown or black pigments for printers and lithographic inks.
1145. Cooke, J. F. 47. 1869.
Copying writing ink. Similar to his no. 2163 of 1868.
- *1146. Binks, H. B. 439. 1869.
Printers' ink. Indigo, hair, glycerin, and starch.
- *1147. Nissen, H. N. 294. 1869.
Printers' ink for banknotes, etc. Soluble surface color ground with glycerin, starch, flake white, or a syrup.
- *1148. Abel, C. D. 1227. 1869.
Transfer ink. Colors for upper tints ground with linseed oil; the ground tints with spirits.
- *1149. Kircher, J., and E. EBNER. 2890. 1869.
Wag. Jahr., 1870, Jahrg. 16, p. 678; 1875, Jahrg. 21, p. 1042; Ber., 1870, Jahrg. 3, p. 807.
Printers' ink capable of being removed from paper. Iron, acid, alkali, tannic and gallic acids, linseed oil, varnish.
- *1150. May, W. C. 2946. 1869.
Non-oleaginous printing inks.
- *1151. Kloen, W. 2993. 1869.
Ink for water color and transfer printing. Pigment, glycerin, and gum arabic.

Patents—Great Britain, continued.

- 1152. Millar, A.** 475. 1870.
Marking ink. Glycerin and silver nitrate.
- *1153. Lawrence, B.** 1419. 1870.
Printers' ink. Glycerin, saccharine matter, gum, and color.
- 1154. Pinkney, R.** 1863. 1870.
Writing and marking ink. Chloride of anilin, nickel chloride, potassium chlorate, sodium chlorate, water, thickener.
- *1155. Webb, W. G.** 2291. 1870.
Ink for printing on glass.
- *1156. Banks, J. H.** 2304. 1870.
Transfer printers' ink. Shellac, black pitch, asphalt, copal, mastic, castile soap, linseed oil, and litho ink.
- *1157. Guyatt, W. T.** 2375. 1870.
Safety printers' and writing ink for labels, tickets, etc. Mixture of sulphuric or hydrochloric acid (or both) and water, ammonia, and colors.
- *1158. Lake, W. R.** 2762. 1870.
Preparation of petroleum products for printers' inks.
- *1159. Lake, W. R.** 689. 1871.
Printers' inks giving press copy similar to ordinary copying ink. Various recipes.
- *1160. Lambert, J. N.** 1124. 1871.
Lithographic ink. Gelatinous matter dissolved in bichromate of potassium, coloring matter, and soap.
- 1161. Whitehouse, E. O. W.** 1998. 1871.
Telegraphic ink. Water, glycerin, anilin dye.
- 1161a. Nissen, H. N.** 2449. 1871.
Ber., 1872, Jahrg. 5, p. 441; Ding., 1872, v. 205, p. 176.
Safety writing ink. To ordinary writing ink containing iron adds ferro-rubigo and potassium ferrocyanid.
- *1162. Pinkney, R.** 2745. 1871.
Printing, marking, and writing inks with anilin base.
- *1163. De Lara, G., and Viscount M. De Salomos.** 2107. 1872.
Printers' ink for blotting paper. Contains more oils, turpentine, etc., than usual.
- 1164. Hodges, J. F.** 1965. 1872.
Safety inks for bank notes. Ordinary writing ink thickened.
- 1165. Siciñoski, C. L.** 3451. 1872.
Ink for tracing paper. Chromate and india ink.
- 1166. Gutensohn, A.** 258. 1873.
Treats tinplate with acid and precipitates a blue-black deposit which may serve for making ink.
- 1167. Halfpenny, G. W.** 262. 1873.
Ink for incombustible paper. Graphite, copal, iron sulphate, nutgall, indigo.
- *1168. Abney, Sir W. de W.** 615. 1873.
Waterproof ink for transferring designs or writing to lithographic plates. Gelatinous substance and a bichromate to render ink sensitive to light.
- *1169. Capreel, G. G.** 760. 1873.
Substitute for gold or bronze dust in lithographic printing, stamping, etc. Uses "altum-cummu," an arsenic compound found in Turkey.
- 1170. Lake, W. R.** 1982. 1873.
Process of injecting air into ink.
- 1171. Little, G.** 2133. 1873.
Telegraphic ink. Anilin blue and glycerin.
- 1172. Mackay, G.** 3129. 1873.
Extraction of oils, resins, and coloring matters from fabrics and fibers.
- 1173. Newton, A. V.** 3176. 1873.
Solid indelible ink. Anilin color, logwood, and chromic acid.
- *1174. Kingdon, T. R.** 3598. 1873.
Grinding machinery for printers' ink.
- *1175. Hyatt, T.** 3684. 1873.
Fireproof printers' ink using asbestos.
- 1176. Newton, A. V.** 3814. 1873.
Solid ink. Adds sugar, gum, and an oxalate to any well-known mixture of ink powder and water.
- 1177. Clark, J. L., and E. O. W. Whitehouse.** 4082. 1873.
Ink for registering fares in public vehicles. Glycerin, water, and magenta dye.
- *1178. Thomas, E. G. P.** 4196. 1873.
Printers' ink. Heavy oils and liquid pitches.
- 1179. Clark, A. M.** 208. 1874.
Manufacture of lampblack.
- 1180. Brown, J.** 731. 1874.
Photographic transfer ink. Fatty substances, metallic oxides, and fusible fluxes.
- 1181. Zuccato, E. de.** 1078. 1874.
Copying ink. Potassium ferrocyanid and iron persulphate.
- 1182. Tongue, J. G.** 1839. 1874.
Indelible ink. Lampblack, silicate of potassium, ammonia, and water.
- *1183. Clark, A. M.** 1995. 1874.
"Asteatine" ink for printing, lithography, and plate printing. Color, alcohol, glycerin, and acids.
- 1184. Casthelaz, J.** 2009. 1874.
Preparation of anilin products.
- *1185. Clark, A. M.** 2389. 1874.
Colored lithographic ink for textile printing.
- 1186. Newton, W. E.** 2939. 1874.
Tannin from waste materials.
- 1187. Zuccato, E. de.** 3150. 1874.
Stencil ink. Anilin color dissolved in glycerin.
- *1188. Zingler, M.** 3757. 1874.
Preparation of anilin for textile printing.
- 1189. Clark, A. M.** 3935. 1874.
Telegraphic insulating ink. Sodium silicate, or a mixture of potassium bichromate and a gum, resin, or gelatinous substance.
- *1190. Jensen, P.** 26. 1875.
Transfer ink for metal printing plates. Lampblack and copal varnish.
- *1191. Whitburn, T.** 605. 1875.
Printers' ink for wood. "Burnt oil," resinous varnish, color, turpentine.
- 1192. Wirth, F.** 1236. 1875.
Wag. Jahr., 1876, Jahrg. 22, p. 1064.
Recipe for copying ink pencil. Pencil point shavings in water used for ink.
- *1193. Edwards, E.** 1362. 1875.
Sympathetic printers' ink. Cobalt chloride and water.

Patents — Great Britain, continued.

1194. Clark, A. M. 1620. 1875.
Production of anilin black.
1195. Holyoake, W. R. 1941. 1875.
Transfer ink for vitreous and glazed surfaces.
- *1196. Thacker, H. 2642. 1875.
Ink for metal printing plates. Addition of gold size, turpentine, and gum dammar to ordinary lithographic or printers' ink.
- *1197. Haddan, H. J. 3453. 1875.
Sympathetic ink for textile printing.
1198. Wilkinson, H. M. 4484. 1875.
Wag. Jahr., 1876, Jahrg. 22, p. 1065.
Violet ink. Logwood, water, tungstic acid, acetic acid.
1199. Byford, A. T. 974. 1876.
Black copying ink. Indigo sulphate, logwood, water, alum, nutgalls, iron sulphate. Also recipe for blue or violet ink.
1200. Zuccato, E. de. 1115. 1876.
Stencil ink. Alkaline solution colored with neutral substance. Alkali destroys varnish on paper, and produces porous stencil sheet.
- *1201. Heuer, F. W. 1662. 1876.
Printers' ink for glass. Pigment, copaiba balsam, turpentine, and oil.
- *1202. Zingler, M. 2621. 1876.
Gold, bronze, and silver inks for printing. Albumen and color.
1203. Pinkney, R., and F. D. WARD.
4470. 1876.
Safety ink for banknotes. Ferro or ferri-cyanids with anilin or vegetable colors.
1204. Berly, J. A. 4820. 1876.
Portable ink. Absorbent matter carrying dry ink is steeped in water.
- *1205. Tongue, J. G. 169. 1877.
Printers' ink. Powdered coal treated at high temperature with oxidizing chemicals, and treatment with alkali.
1206. Pumphrey, J. 895. 1877.
Copying ink. Anilin crystals, acetic acid, and glycerin.
- *1207. Williams, M. 950. 1877.
Heating chamber for oils, gums, etc., used in the preparation of printing inks.
- 1207a. Haddan, H. J. 2493. 1877.
Ber., 1878, Jahrg. 11, Teil 1, p. 1003, 1271;
Wag. Jahr., 1878, Jahrg. 24, p. 1143.
Ink pencil.
- *1208. Howard, T. 3402. 1877.
Printers' ink. Powdered peat, charcoal, and linseed oil.
- *1209. Guest, E., and T. GUEST. 3432. 1877.
Printers' transfer ink. Beeswax, pitch, japan wax, varnish, turpentine, and a black pigment.
1210. Zuccato, E. de. 3647. 1877.
Stencil ink.
1211. Jacobsohn, N. 3648. 1877.
Writing ink. Anilin, glycerin, sugar, and gum arabic.
1212. Lake, W. R. 1586. 1878.
Copying ink powder. Color, sugar, gum arabic, and syrup.
1213. Wirth, F. 1918. 1878.
Ink for tracing paper. Concentrated solutions of anilin pigments.
1214. Richmond, H., and W. S. RICHMOND.
2636. 1878.
Indelible ink for writing and cancelling. Eosin, anilin colors, cupric chloride, ammonium chloride, sodium chlorate, glycerin, lampblack, water, and oil.
- *1215. Wilson, J. G. 4606. 1878.
Reproducing ink. Color dissolved in alcohol and water.
- *1216. Pixis, T. 5036. 1878.
Printers' transfer ink. Printers' ink mixed with japanese gold size.
1217. Winterhoff, F. 5098. 1878.
Transfer ink. Colors, linseed oil, nut oil, resin, venice turpentine, white wax, suet, and powdered enamelling flux.
1218. Hickisson, J. 5122. 1878.
Marking ink, based on vanadium salts.
- *1219. Haddan, H. J. 141. 1879.
Printers' ink. Metallic powder mixed with a silicate.
1220. Wirth, F. 239. 1879.
Copying ink for leather, paper, fabrics, etc., with apparatus.
1221. Clark, A. M. 526. 1879.
Beads of color pressed into cavity of pen. Coal tar agglutinated with gum, glucose, honey, etc., by means of hot water.
1222. Kissam, A. 861. 1879.
Transfer ink. Concentrated anilin, methylated spirit, gum arabic, and water.
1223. Lake, W. R. 1104. 1879.
Ink for hand stamps. Adds purified oil to greasy inks.
1224. Rosefeld, P. G. 2256. 1879.
Transfer ink for gelatinous copying composition. Color, water, alcohol, sodium bisulphite, ether, vinegar, gum or sugar.
1225. Alisoff, M. 235. 1879.
Transfer ink. Anilin and alcohol. Also printers' ink using anilin and glycerin.
- *1226. Gray, T. H. 2518. 1879.
Printers' ink. Drying oil in current of heated air brought to proper consistency to use as a base.
- *1227. Jefferies, J. E. 3391. 1879.
Printers' ink; transfer ink; writing ink; with anilin base.
1228. Taylor, J. 3499. 1879.
Indelible ink. Cupric chloride, anilin chloride, water, gum arabic, glycerin, potassium chlorate.
1229. L'Heureux, A. D. 3678. 1879.
Transfer ink. Sugar, common ink, black lead, and alum.
1230. Boulton, A. J. 3685. 1879.
Transfer ink for glass. Tallow, beeswax, resin, asphaltum, and lampblack.
1231. Jensen, P. 4187. 1879.
Copying ink. Anilin, soluble metallic salts, neutral coloring medium, and powdered carbon.
1232. Nesbit, A. A. 4204. 1879.
Safety ink. Clay, anilin dye, and volatile liquid added to ordinary printers' ink.
1233. Pumphrey, J. 4409. 1879.
Transfer ink. Anilin and water.

Patents—Great Britain, continued.

1234. Gestetner, D. 4524. 1879.

Transfer ink for documents, also for printing. Anilin base.

*1235. Kessler, C. 4685. 1879.

Printers' black ink. Pitch or asphalt, tar oil, fatty acid, anilin violet, and cart grease.

1236. Imray, J. 4788. 1879.

Transfer ink for gelatin surface. Aqueous solution of metallic salt or a tanning substance to which color is added.

1237. Haddan, H. J. 4997. 1879.

Canceling ink for special paper. Potassium bichromate, copperas, oxalic acid, red prussiate of potash, logwood, and color.

*1238. Wirth, F. 5232. 1879.

Printers' ink. Coal tar, sulphuric acid, calcined soda, fat, and glycerin.

*1239. Shaw, I. B. 690. 1880.

Printers' ink for tiles. Colors ground in varnish with addition of copaiva balsam.

*1240. Pfeleiderer, P. 827. 1880.

Printers' ink. Colors, copaiva balsam, turpentine, resin oil, and driers.

*1241. Klein, A. L. 1028. 1880.

Printers' ink. Raw linseed oil and driers boiled to consistency.

1242. Binks, H. B. 1358. 1880.

Copying or transfer ink consisting principally of aluminous solution.

*1243. Alexander, E. P. 1615. 1880.

Printers' ink. Mineral hydrocarbons, caustic potash. Residue used as a pigment.

1244. Emery, J. J. 1759. 1880.

Ink for articles to be enamelled. Color, camphor, and dissolved wax.

1245. Johnson, J. H. 1771. 1880.

Marking ink. Ortho-nitrophenylpropionic acid, gum water, sodium carbonate, and milk sugar. Heat brings out color on marked article.

1246. Sachs, J. J. 1838. 1880.

Marking ink. Polysulphides of iron, zinc, copper, etc., heated with non-volatile fatty and oily bodies, waste fibers, etc., and alkali.

*1247. Kessler, C. 2216. 1880.

Black printers' ink, especially for canceling postage stamps.

1248. Nawrocki, G. W. 2832. 1880.

Ink for stamping pads. Gelatin, glue, agar-agar, color.

1249. Ungerer, A. 3418. 1880.

Solid ink. Agar-agar (or isinglass), water, glycerin, starch, syrup, and color.

1250. Bertram, L. B. 4591. 1880.

Ink for pads. Anilin, acetic acid, glucose, glue or gelatin, glycerin, and water.

*1251. Bastand, C. T. 4693. 1880.

Printers' ink. Grease from engineers' cleaning waste treated with solvents and distilled.

1252. Edwards, E. 4716. 1880.

Ink for gelatin copying press. Acetic iron and chloride of iron, printing ink, and glycerin.

1253. Ford, A. 5125. 1880.

Ink for writing on special paper.

*1254. Dupré, A., and O. HEHRER.

Invisible printers' ink for checks. Zinc sulphide, lead carbonate or salts of bismuth, glycerin, treacle, and gum arabic.

1255. Poirson, C. 436. 1881.

Transfer ink. Color, salt which melts in water of crystallization, acid, sugar, gum.

1256. Johnson, J. H. 466. 1881.

Marking ink similar to no. 1771 of 1880.

1257. Stoddart, A. F. 741. 1881.

Writing and copying ink from spent tan liquor.

*1258. Gard, W. G., and T. H. COBLEY.
903. 1881.

Printers' ink. Waste pickle from galvanizers' works, and leather cuttings.

1259. Haddan, H. J. 963. 1881.

Copying ink requiring no damping of paper. Syrup, alcohol, water, uranium acetate, and color.

1260. Priestman, T., and others. 1002. 1881.

Ink for boot-blackening compositions, using spent tan liquor.

*1261. Brackebusch, H. 1203. 1881.

Printers' ink. Paraffin oil, colophonum, lamp-black or other pigment, with variations to produce a cheaper ink.

*1262. Bastand, C. T. 2103. 1881.

Printers' ink. Black resin or resin oil, soap, blue color, greasy material.

*1263. Jensen, P. (Void.) 2868. 1881.

J.S.C.I., 1882, v. 1, p. 182.

Printers' ink. Asphalt, anthracene oil, anilin color, lubricating oil.

*1264. Lake, W. R. 2948. 1881.

Copying and printers' ink based on nitrate of uranium.

1265. Meihé, J. R. 3410. 1881.

Fireproof writing ink. Platinum chloride, lavender oil, lampblack, varnish. For printing he uses india ink, water, and gum arabic.

1266. Gurney, H. S. L. 3605. 1881.

J.S.C.I., 1882, v. 1, p. 147.

Writing ink from waste tan liquor and iron filings.

1267. Clark, A. M. 3762. 1881.

Writing ink. Albumen, a bichromate, and ferrocyanid of potassium.

*1268. Russig, W. 728. 1882.

Indelible printers' ink. Iron salts and metallic iron added to ordinary printers' ink. Also recipe for making writing ink therefrom.

1269. Rath, F. 1391. 1882.

Copying ink. Sodium silicate and a greasy ink.

*1270. Lake, W. R. 1849. 1882.

Printers' ink for fabrics. Pyroxlin, color, and a menstrum.

*1271. Horsfall, A. H. 2220. 1882.

Lithographic ink for fabrics. Color, oil, varnish, and anilin dyes.

1272. Detmold, E. 3083. 1882.

Quick-drying writing ink. Water, spirits, cloves, anilin dye.

*1273. Claus, C. F. 4106. 1882.

Printers' ink. Waste liquors from tin plate or similar works.

Patents—Great Britain, continued.

1274. Langbeck, H. W. 5946. 1882.

Marking ink. Salicylic acid, turpentine, spirits of wine, glycerin, water, albumin, and color.

1275. Hickisson, J., and H. W. LANGBECK. 751. 1883.

Colored marking ink. Gutta percha, india rubber, bisulphide of carbon, and color.

1276. Dufréne, H. A. 859. 1883.

Indelible ink. Water, sodium carbonate, logwood, sugar, anilin black, and soot.

*1277. Clark, A. M. 941. 1883.

Printers' and writing inks. Recipes for black and other colors; for indelible writing ink; for copper plate printing.

1278. Nesbit, A. A. 949. 1883.

Safety ink using extract of anchusine.

*1279. Gard, W. G., and T. H. COBLEY. 2549. 1883.

Printers' ink. Leather waste, sodium carbonate or acetate, or caustic soda and an iron salt.

1280. Appleyard, J. W., and others. 2816. 1883.

Soluble black from spent tan liquors for use in writing ink.

*1281. Bolton, C. E. 3600. 1883.

Copying and printers' ink. Blue galls, iron sulphate, blue vitriol, gum arabic, white ginger, and water.

*1282. Lake, W. R. 3638. 1883.

Ink for printing on rubber fabrics. India rubber, red lead, sulphur, and naphtha.

1283. Rydill, G. 3822. 1883.

Fireproof ink for imitation stained glass. Powdered asbestos, acids, and alum.

1284. Warwick, T. J. 3969. 1883.

Transfer ink for embroidery. Compo-black, beeswax, and white lead.

*1285. Moseley, C. 5207. 1883.

Printers' ink for india rubber. Chloroform, benzol, drying oil or varnish, with color.

1286. Lardeur, G. E. 5287. 1883.

Transfer ink. Resin, gum dammar, color, turpentine.

*1287. Shaw, I. B., and others. 383. 1884.

Printers' transfer ink for signs, etc. Camphor, wax, copaiba balsam, and petroleum.

1288. Chatterton, E. S. 2220. 1884.

Copying ink. Powdered color and glycerin.

1289. Friend, F. 7160. 1884.

Copying ink. Iron liquor, tannic acid, and glycerin.

*1289a. Clark, W. 12385. 1884.

De-inking process.

1290. Haddan, H. J. 12727. 1884.

Transfer ink. Glycerin, dextrin, anilin, and earth color.

1290a. Hickisson, J. 15961. 1884.

J.S.C.I., 1886, v. 5, p. 30.

Mordants or fixers for marking ink and pencils. Pyrogallie acid, borax, hyposulphite of soda, sodium bicarbonate, ammonia, alum, washing soda, gums, chalk, wax, albumin, collodion, varnish.

1291. Armour, L. H. 440. 1885.

J.S.C.I., 1886, v. 5, p. 30.

Writing ink capable of being either fixed or removable. Pigment, gum arabic, gelatin, and bichromate.

*1292. Reid, A., and J. JAMESON. 1380. 1885.

Soluble printers' transfer ink. Gum, glycerin, albumin, treacle, and color.

1293. Friend, F. 1515. 1885.

Stencil ink. Potassium or sodium hydrate, orchil or other color.

*1294. Simpson, D. C. 3980. 1885.

Writing, marking, or printers' ink made indelible in water. Alkalies, cyanides, or ferro-cyanides.

*1295. Winterhof, L. 5929. 1885.

Lithographic transfer ink. Suet, pitch, turpentine, mastic, litho varnish, beeswax, printers' ink, lamp-black, Brunswick black.

1296. Frusher, T. 8241. 1885.

J.S.C.I., 1886, v. 5, p. 427.

Black writing ink from waste dye liquors.

1297. Wass, A. G. 9249. 1885.

Pigment for black ink. Residue from boiling or filtering of saccharine liquids.

*1298. Macrone, W. 9413. 1885.

Printing and lithographic ink. Seed oil, resin, paraffin wax, copal varnish.

1299. Batty, T. 12910. 1885.

Transfer ink. Sulphate of copper or of iron, water, and dye.

1300. Guthiel, R. 1601. 1886.

Soap, wax, mastic, shellac, turpentine, lampblack.

*1301. Clark, A. M. 2878. 1886.

Powdered coloring composition for printers' inks. Resinate of a metal combined with coloring matter.

1302. Payne, W. J. 3179. 1886.

Ink tablet for rubber stamps. Glycerin, gelatin, water, color.

1303. Wise, W. L. 8994. 1886.

Insulating ink for automatic telegraph. Mucilage diluted and colored.

1304. Wass, A. G. 9992. 1886.

Calcined sugar filtrate as a basis.

*1305. Cunliffe, H., and M. CONDON. 15685. 1886.

Printers' ink. Fixing and glazing compound. "Painters' terbene," linseed oil, and varnish.

*1306. Schlumberger, A. 1076. 1887.

Printers' safety ink. Vegetable color which changes color on addition of an alkali.

1307. Lake, H. H. 2123. 1887.

Stencil marking ink. Benzene, naphtha or turpentine, pigment, bronze powder, and kerosene.

*1308. Bertling, L. 5464. 1887.

Lithographic transfer ink. Suet, beeswax, soap, shellac, vegetable black, varnish, sperm oil, and spermaceti.

1309. Himly, M., and others. 6730. 1887.

Sympathetic ink. Magnesium platino-cyanid.

1309a. Tallmadge, J. W. 13500. 1887.

J.S.C.I., 1888, v. 7, p. 34.

Fluid ink eraser. Solution of chloride of lime and acetic acid.

Patents—Great Britain, continued.

1310. Hackney, W. 15079. 1887.

Non-drying and fixing compositions for writing inks. Uses chloride of calcium.

1311. Hickisson, J. 15320. 1887.

Congo and benzo-purpurin and plastic binders moulded into solid marking ink for fabrics.

*1312. Groth, L. A. 17925. 1887.

Printers' and stamping ink. Anilin solutions, bitumen, resins, or fats.

1313. Dimitry, C. P. 648. 1888.

J.S.C.I., 1889, v. 8, p. 43.

Indelible ink, using gelatin or animal glue, bi-chromate, color, and water.

*1314. Bensinger, A. 3321. 1888.

Ink for printing on celluloid and like pyroxylin compounds. Anilin color, carbolic or acetic acid.

*1315. Phillips, S., and A. STEPHEN.
4823. 1888.

Photo-mechanical transfer ink. Beeswax, spermaceti, tallow, lampblack, and litho ink.

*1316. Armstrong, H. G., and J. E. WALLER.
6796. 1888.

Printers' ink for advertisements on sanitary paper. Addition of disinfectants or medicating materials.

1317. Smith, G. H. 7149. 1888.

Transfer ink for copying documents. Blue-black: green anilin, magenta, hydrochloric acid, water, alcohol. Green: green anilin, water, alcohol, hydrochloric acid.

1318. Quelch, G. H. 7472. 1888.

Ink which causes paper when touched in any part with a red-hot iron to burn a stencil. Uses nitrate of potassium.

*1319. Neilson, G. R., and others.
13968. 1888.

Printers' ink for advertisements on sanitary or toilet paper slips. Uses potassium permanganate dissolved in non-poisonous oil or fluid.

1320. Doyle, D. 14457. 1888.

Marking ink. Gum, spanish brown, and iron sulphate mixed into a powder which is afterwards dissolved in water as required.

1321. Jones, C. S. 15457. 1888.

Sympathetic ink. Salt of cobalt or of nickel dissolved in spirit.

1322. Brasier, E., and J. H. KNOWLES.
2360. 1889.

Coloring extract from *Bauhinia Vahl*ii.

1323. Hallam, W. 4513. 1889.

Transfer ink for marking linen. Color, mordant, mixed with wax, resin, or bituminous materials.

*1324. Weight, J. H. 6287. 1889.

Ink for toilet paper. Medicated substance, oils, and gum arabic.

*1325. Mills, E. J. 8971. 1889.

Antiseptic writing and printing inks. Borax, boric acid, and a salicylate added to commercial inks.

1326. Williams, M., and J. ASCOUGH.
9442. 1889.

Soluble blue for writing inks. Boron compound and a dye.

1327. Lucas, D. 9960. 1889.

Ink for pottery transfers. China clay, drop black, rose pink, turpentine, printers' oil, and canada balsam.

*1328. Carter, McI. J. D. 12289. 1889.

Sticky inks for printing designs to be covered by flock. For lithographic work boiled linseed oil is ground with colors. For letterpress, colors are ground with sodium silicate and treacle.

1329. Ashton, R. 14388. 1889.

J.S.C.I., 1890, v. 9, p. 857.

Dry soluble writing ink. Dissolved colors are dried on a carrying medium (such as paper) which is cut into strips.

1330. Pulford, G. C. 15565. 1889.

Safety ink to prevent fraudulent opening of envelopes. Uranium acetate, potassium ferrocyanid, white lead or white zinc.

*1331. Browne, N. 15839. 1889.

J.S.C.I., 1890, v. 9, p. 630.

Printers' and lithographic ink. Maltha and lamp-black.

1332. Wilkinson, C. H. 16982. 1889.

Color standard system resembling diatonic scale.

*1333. Huelser, C. 20830. 1889.

Printers' ink. Coal dust, linseed oil and varnish.

1334. Conrad, W. S., and H. T. LILLEY.
2011. 1890.

J.S.C.I., 1890, v. 9, p. 612.

Copying ink for dry paper. Gall nuts, iron sulphate, magnesium chloride, colors, and glycerin.

1335. Tschofen, F. 2130. 1890.

Invisible ink. Whiting and gum arabic.

1336. Conrad, W. S. 10401. 1890.

J.S.C.I., 1891, v. 10, p. 713.

Copying ink. Ammonium nitrate added to slow drying ink containing glycerin.

1337. Piffard, B. 10905. 1890.

Copying ink. Copying paper is dipped in a solution of gallic, tannic, or pyrogallic acid, and used with ink containing sulphate or other salt of iron.

*1338. Holt, O. G. 11168. 1890.

Printers' ink. Residue from petroleum distillation as a base.

*1339. Davison, W. 15743. 1890.

J.S.C.I., 1891, v. 10, p. 937.

Metallic printers' ink.

*1340. Higgins, C. M. 15857. 1890.

J.S.C.I., 1891, v. 10, p. 252.

Stamping, copying, and printers' ink. Oleic acid and colors.

*1341. Higgins, C. M. 15858. 1890.

J.S.C.I., 1891, v. 10, p. 253.

Stamping, copying, and printing ink. Color dissolved in essential oils of the spices, to which oleic acid may be added.

*1342. Lake, H. H. 16689. 1890.

J.S.C.I., 1891, v. 10, p. 136.

Printers' ink. Vaseline, linseed oil, zinc sulphate, litharge, red lead, and binoxide of manganese, and pigments.

1343. Just, T. W., and others. 16757. 1890.

J.S.C.I., 1891, v. 10, p. 541.

Safety writing ink. Carbon, gum arabic, caustic soda, oxalic acid, india ink, vanadium, aleppo galls, anilin dyes, water.

Patents—Great Britain, continued.

1344. Beales, H. 17373. 1890.
J.S.C.I., 1892, v. 11, p. 45.
Copying ink. Nutgalls, logwood, water, iron sulphate, gum arabic, cloves, vegetable black, and glycerin.
- *1345. Haddon, F. D., and C. R. HILL. 873. 1891.
Printers' ink for toilet paper. Based on permanganate of potassium or eucalyptus oil.
1346. Leech, F. L., and A. HORROBON. 1616. 1891.
J.S.C.I., 1892, v. 11, p. 446.
Indestructible ink. Turpentine, asphalt, resin, alum, beeswax.
1347. Coën, E. 3247. 1891.
J.S.C.I., 1892, v. 11, p. 446.
Copying ink. Sugar and glycerin mixed with ordinary ink.
1348. Sherwood, W. 5437. 1891.
J.S.C.I., 1892, v. 11, p. 346.
Copying machine ink. Dissolved anilin colors mixed with linseed oil or other drier.
- *1349. De Brandt, F. 12104. 1891.
Lithographic transfer ink. Antimony black, bone black, resin, varnish, berlin blue, and ordinary printers' ink.
- *1350. Bertling, L. 12200. 1891.
Lithographic transfer ink. Suet, beeswax, curd soap, shellac, vegetable black, litho varnish, and spermaceti.
- *1351. Dreyfus, C. 17635. 1891.
Printers' ink. Lakes soluble in benzol, naphtha, etc.
- *1352. Higgins, C. M. 93. 1892.
J.S.C.I., 1892, v. 11, p. 362.
Printers' and stamping ink. Color, carbolic acid, castor oil, essential oil.
- *1353. Jefferson, F. T. 3103. 1892.
Ink for ruling and printing on copying paper. Pigment and a volatile liquid such as methylated spirit, and an adhesive.
- *1354. Kohn, J., and S. STRAUSS. 3364. 1892.
Printers' ink for playing cards or celluloid. Colors ground with waterproof medium.
- *1355. Hagelberg, W. 4167. 1892.
Printers' ink for celluloid. Uses a celluloid solvent, such as amyl acetate.
- *1356. Friswell, R. J., and F. H. LEEDS. 18721. 1892.
J.S.C.I., 1893, v. 12, p. 824.
Printers' copying ink. Lampblack or other suitable pigment with boiling aqueous solution of anilin dye, dried, and ground with litho varnish.
1357. Hickisson, J. 5316. 1893.
Marking ink. Anilin dyes, oil, mordant, india rubber solution.
1358. Blancan, C. 7236. 1893.
Aluminium ink.
- *1359. Bibby, J., and J. BIBBY. 12863. 1893.
J.S.C.I., 1894, v. 13, p. 145.
Printers' ink. Cotton seed foots as a basis.
- *1360. Hollyer, E. 16380. 1893.
Toilet paper printers' ink. Pilewort juice, thyme, groundsel, elder leaves, oil varnish.
- *1361. Cox, H. W. C., and R. J. CROWLEY. 1542. 1894.
Facsimile telegraphic ink. Tin or lead, sulphuric acid, nitric acid, color.
- *1362. Kuwert, W. 2093. 1894.
Ink for celluloid labels. Alcohol, silver nitrate, nigrosin.
1363. Nienstaedt, E., and L. GOLDMARK. 3236. 1894.
J.S.C.I., 1894, v. 13, p. 511.
Solid ink. Quartz powder immersed in ordinary ink and dried.
1364. Nienstaedt, E., and others. 5078. 1894.
Preparation of ink sticks.
- *1365. Degroote, F. A., and A. A. D. DES AULNOIS. 6268. 1894.
Printers' ink for paper impregnated with dextrin. Color, linseed oil, rubber solution, and gums.
- *1366. Cordeaux, W. 13676. 1894.
Printers' copying ink. Printers' ink and vaselin.
- *1367. Barnwell, F. 20423. 1894.
For printing in several colors at one impression. Ordinary ink mixed with castor oil, turpentine, glycerin, oil of tar, copaiba balsam, ether, chloroform.
- *1368. Sharp, S. H. 21607. 1894.
Ink for printing textiles. Litho varnish, gold size, and a metallic powder.
1369. Scott, J. 23694. 1894.
Transfer ink. Metal dust, wax, resin.
- *1370. Priestley, G., and E. SWANN. 955. 1895.
J.S.C.I., 1895, v. 14, p. 373.
Printers' ink for leather. Lard, margarine, powdered metal, size, and linseed oil or varnish.
- *1371. Thacker, H. 6938. 1895.
Printers' ink for paper, wood, metals, etc. Undesired ink surfaces removed by color discharging fluid.
1372. Hallett, A. 17868. 1895.
Ink for typewriter imitations. Color, black molasses, glucose, glycerin.
1373. Adams, E. J. 3459. 1896.
Invisible ink. Sulphuric acid and water.
- *1374. Grundy, G. H., and G. A. LINGARD. 4093. 1896.
Printers' ink for fired tiles.
- *1375. Taylor, F. C., and J. COOKE. 8376. 1896.
Printers' ink. Colored printers' inks are mixed with copaiba balsam, glycerin, sandal wood, oil, petroleum, balsam fir, etc.
- *1376. Sharp, S. H. 16274. 1896.
Printers' ink for stenciling on fabrics. Bronze or aluminium powder with suitable menstrum.
1377. Temple, E. H. 17226. 1896.
Writing ink. Salt water, logwood, galls, gum arabic, iron sulphate. Stains are easily removed from fabrics.
- *1378. Michel-Dansac, J. A., and L. CHASSAGNE. 18131. 1896.
Photographic color pigments adapted for use as printers' inks. Several recipes.

Patents—Great Britain, continued.

1379. Webb, R. 26992. 1896.

J.S.C.I., 1897, v. 16, p. 1012.

Safety ink. Flour, magnesium oxide, soap, carbonate of sodium, color.

*1380. Boulton, A. J. 30121. 1896.

J.S.C.I., 1898, v. 17, p. 55.

Bronze printers' inks. Fixed oil base.

*1381. Rataud, P. 1228. 1897.

Printers' transfer ink. Linseed oil, suet, and printers' ink.

1382. Billings, R. W. 7376. 1897.

Stencil ink. Dextrin, glue, oil, and metal or colored powder.

*1383. Gentile, E. O. S., and H. R. GENTILE. 7399. 1897.

J.S.C.I., 1897, v. 16, p. 546.

Printers' ink. Wood powder, wood pulp, or cellulose, impregnated with color.

*1384. Taylor, F. C. 9121. 1897.

Printers' ink. Powdered manganese and alcohol added to ink described in British patent no. 8375 of 1896.

1385. Potter, A. L. 11013. 1897.

Ink for branding, for wool bales, etc. Glue, gelatine or size, water, potassium bichromate, lamp-black, and turpentine.

1385a. Lyle, J. N. 12281. 1897.

J.S.C.I., 1898, v. 17, p. 455.

Ink stain remover. Citric acid, water, bleaching powder.

*1386. Ogilvy, D. J. 18533. 1897.

J.S.C.I., 1897, v. 16, p. 1012.

Printers' ink. Process of using super-heated steam.

*1387. Webb, R. 19783. 1897.

J.S.C.I., 1897, v. 16, p. 1012.

Safety printers' ink. Dextrin, treacle, glycerin, anilin dye.

1388. Lake, H. H. 21830. 1897.

Effervescent ink tablets. Anilin or nigrosin, gum arabic, sodium bicarbonate, and tartaric acid.

1389. Moeller, J. 21991. 1897.

J.S.C.I., 1898, v. 17, p. 148.

Indelible sympathetic ink. Alum, garlic juice.

*1390. Hadley, W. S., and others.

23080. 1897.

Printers' ink for etched plates on wax paper. Beeswax, pitch, and colors.

*1391. Stoop, A. 24504. 1897.

Printers' ink. Grisee oil obtained in Java.

1392. Cox, F., and others. 24560. 1897.

Preparation of writing ink so that ink is not formed until writing fluid is on the paper. Paper impregnated with solution of tannin. Ink is a solution of iron sulphate.

*1393. Banner, S. 29728. 1897.

J.S.C.I., 1898, v. 17, p. 1158.

Printers' ink. Solution of colophony treated with caustic soda or potash and used as a substitute for linseed oil.

*1394. Burger, H. J. 30104. 1897.

Ink for photographic reproductions.

*1395. Izambard, G. 5294. 1898.

Ink for X-ray printing. For handwriting uses white lead and gum; for typewriter, white lead and linseed oil.

*1396. Simultaneous Color Printing Syndicate, and H. DE MONTIN. 10153. 1898.

Ink for polychromatic blocks. Waxes, oils, and colors.

*1397. Gotliffe, H. 11951. 1898.

Printers' lustrous ink for waterproofed fabrics. Nickel dust and resin.

*1398. Pitt, S. 20356. 1898.

Printers' ink. Gelatinous thickening material from seaweed.

*1399. Stoop, A. 23071. 1898.

J.S.C.I., 1899, v. 18, p. 379.

Printers' ink. Natural purified oil from Grisee, Java, distilled and mixed with color.

1400. Lichtentag, I., and A. LICHTENTAG. 24644. 1898.

J.S.C.I., 1899, v. 18, p. 680.

Indelible writing ink. Carbon, soap, and water.

1401. Kretschmann, E. 6727. 1899.

Sympathetic ink. Paper is treated with solution of haloid salt of cobalt, glycerin, and gum arabic. Writing is done with a solution of rock salt.

*1402. Bachem, P. F. 8976. 1899.

Sympathetic printers' ink based on cobalt salts.

*1403. Hay, L. 11592. 1899.

Antiseptic ink for toilet paper. Recipes for blue and red.

1404. Power, C. F. 14957. 1899.

Quick-drying writing inks. Recipes for black and red.

*1405. Printing Arts Co., and I. ORLOFF. 17557. 1899.

Printers' ink. Colors in a gum resin solution.

*1406. Hoz, A. 22296. 1899.

Printers' ink for textiles and paper. Linseed oil base and mordants.

*1407. Izambard, G. 1290. 1900.

Inks for X-ray work contain metallic powders more or less opaque to rays.

1408. Brown, E. W. 3807. 1900.

J.S.C.I., 1901, v. 20, p. 272.

Typewriter copying ink for prepared paper. Emulsion of tannin, iron sulphate, deliquescent salt and glycerin, or with a non-drying oil.

1409. Kretschmann, E. 7367. 1900.

Sympathetic ink. Cobalt salt.

*1410. Butler, T. T. 12945. 1900.

Printers' ink for paper hangings, giving crêpe effect.

*1411. White, W. G., and R. A. A. WHITE. 13145. 1900.

J.S.C.I., 1901, v. 20, p. 714.

Printers' ink for polychromatic blocks. Stearic acid, vegetable wax, linseed oil, resin, soda, fullers' earth, and colors.

*1412. Ogilvy, D. J. 14886. 1900.

J.S.C.I., 1900, v. 19, p. 1011.

Process of heating printers' inks.

Patents—Great Britain, continued.

*1413. Hofer, H., and H. HOFER.

17126. 1900.

Ink for celluloid transparencies. Camphor, paraffin, "manganiso-linolate."

*1414. Stevenson, J. 17783. 1900.

J.S.C.I., 1901, v. 20, p. 1208.

Printers' ink that changes color with time. Mixture of permanent and non-permanent colors.

1414a. Raynes, A. 21063. 1900.

J.S.C.I., 1901, v. 20, p. 1108.

Marking ink for textiles, using anilin black.

*1415. British Oil and Cake Mills, and A. G.

WASS. 23231. 1900.

J.S.C.I., 1901, v. 20, p. 1005.

Printers' ink. Mucilage from cotton-seed oil, acid tar sludge, resin, and carbon.

1416. Langhans, R. 430. 1901.

J.S.C.I., 1902, v. 21, p. 123.

Ink for electric telegraph. Compounds of precious metals or their halogen salts, sulphur derivatives of aliphatic carbon compounds, and a solvent. Paper passed through hot rollers gives a metallic impression.

*1417. Hoz, A. 1366. 1901.

J.S.C.I., 1901, v. 20, p. 985.

Printing colors for chemical printing on stuffs. Thickening substance and dyes, with or without mordants. After printing, the colors are steamed, developed and fixed.

1418. Lucas, R. D. 3100. 1901.

Ink for china, glass, etc. Turpentine, rose pink, drop black, china clay, printers' oil, resin, and flux if necessary.

*1419. Imray, O. 5168. 1901.

J.S.C.I., 1901, v. 20, p. 803.

Printers' and writing inks. Indo-phenol-thio-sulphates.

*1420. Wass, A. G. 6061. 1901.

J.S.C.I., 1902, v. 21, p. 1032.

Printers' ink varnish. Resin dissolved in mineral oil, color.

*1421. Van Dyke, F. R. 6307. 1901.

Ink for photozincography. Litho ink and bitumen; or transfer ink and Burgundy pitch, thinned with turpentine.

*1422. Tellkamp, A. 8645. 1901.

Ink for transferring photographic copies to stone or metal plates. Turpentine, black japan, alcoholic iron varnish, fats, and oils or waxes.

*1423. Brandel, F. de., and A. DE BAUDRY

D'ASSON. 8923. 1901.

J.S.C.I., 1902, v. 21, p. 782.

Manufacture of colors from heavy mineral oils.

*1424. Lake, H. H. 12826. 1901.

J.S.C.I., 1902, v. 21, p. 782.

Lithographic and printers' ink. Color, glycerin, alkali, and volatile resin oil.

*1425. Lilienfeld, L. 23892. 1901.

J.S.C.I., 1902, v. 21, p. 771.

Vehicles for pigments in textile printing. (1) Metallic salts of fatty acids, or resinates, insoluble in water. (2) Organic-acid radical derivatives of albumin. (3) India rubber or gutta percha.

*1426. Weise, M., and others.

25705. 1901.

Printers' ink for make-ready. Addition of resin or soft soap to ordinary ink.

*1427. Schmitz, J. S. 6698. 1902.

Printers' ink for wall paper or woven fabrics.

*1428. Schmeidel, F. R. 8371. 1902.

J.S.C.I., 1902, v. 21, p. 969.

Printers' ink. Dark shade on colored ground. Resin or gum with volatile solvent.

1429. Geary, E. 15193. 1902.

Copying ink requiring neither moisture nor press. Galls, iron sulphate, anilin blue, glycerin, essence of cloves, water.

*1430. Jamieson, W. A., and others.

20413. 1902.

Wall paper printers' ink. Color, gum tragacanth.

1431. Brown, T. H., and J. E. STAPLES.

21241. 1902.

Branding fluid for carcasses, poultry, and eggs. Mitigated caustic, logwood, water, methylated spirits.

*1432. Meth, B. Z. 24610. 1902.

J.S.C.I., 1903, v. 22, p. 1131.

Printing transfers for etching glass. Ammonium fluoride, hydrofluoric acid, magnesia alba, water, dextrin, anilin black.

1433. Stewart, W. 24719. 1902.

Copying ink using neither press nor dampener. Galls, iron sulphate, gum arabic, water, creosote, glycerin, potassium permanganate.

1434. Ninnis, T. M. 3033. 1903.

Ink for ground glass. Canada balsam, gum, resin, turpentine.

*1435. Grabau, E. F. W. U. 3301. 1903.

J.S.C.I., 1903, v. 22, p. 739.

Waterproof ink for wall paper. Starch, borax, water, color, glycerin, alcohol, and caustic soda.

1436. Cook, H. W., and J. PLUNKETT.

5610. 1903.

Preparation of raw ox-gall for ruling ink.

*1437. Préaubert, L., and G. A. THUBÉ.

11028. 1903.

J.S.C.I., 1904, v. 23, p. 448.

Thickener for printers' ink. Casein base.

*1438. Johnson, J. Y. 12681. 1903.

J.S.C.I., 1904, v. 23, p. 485.

Printers' ink. Compounds of coloring matter bases with fatty acids or their alkaline salts.

1439. Braun, H. 14299. 1903.

Conducting ink for autographic or facsimile telegraphy. Acid solution of platinum, copper, etc., combined with graphite.

*1440. Lilienfeld, L. 14483. 1903.

J.S.C.I., 1903, v. 22, p. 1345.

Ink for glossy silk-like effects. Finely powdered mica and cellulose solution.

1441. Carter, M. J. D. 22195. 1903.

Ink for backing typewriter sheet to prevent absorption of wax of stencil sheet. Glycerin added to ordinary printers' ink.

1442. Rosenhain, W. 26951. 1903.

J.S.C.I., 1904, v. 23, p. 1904.

Non-corrosive writing ink for glass and metal. Silicate of sodium or potassium, aluminate of potassium or sodium, and color.

Patents — Great Britain, continued.

- *1443. Marzin, R. 1933. 1904.
J.S.C.I., 1905, v. 24, p. 91.
Printing paste for ceramic ware. Colors, aloe extract, syrup, glycerin, and alkaline carbonate.
1444. Rowan, J. 3909. 1904.
J.S.C.I., 1904, v. 21, p. 453.
Safety ink. Specially prepared paper overprinted with ink of iron perchlorate, potassium iodide, and a caustic alkali.
1445. Smith, F. P., and G. F. BESWICK. 4447. 1904.
Copying ink. Logwood, gall, iron perchloride, glycerin, rose water.
- *1446. Millar, G. G. 7391. 1904.
Colored lithographic ink. Linseed oil, wax, and anilin dye.
1447. Leisel, M., and R. KÜPPER. 17624. 1904.
J.S.C.I., 1905, v. 24, p. 893.
Writing and drawing ink. Metallic dust, flux, and a liquid neutral organic substance that does not evaporate until the metal or flux is melted.
1448. Bennett, J. F., and J. MASTIN. 21062. 1904.
J.S.C.I., 1905, v. 24, p. 978.
Pigment of finely divided colored glass, porcelain, or other vitreous substance.
- *1449. Bennett, J. F., and J. MASTIN. 24733. 1904.
J.S.C.I., 1905, v. 24, p. 978.
Printers' ink. Potters' clay and color are fired and powdered and used as pigment.
1450. Flack, A. M. 25092. 1904.
J.S.C.I., 1905, v. 24, p. 1301.
Fountain pen ink. Carbon, linseed oil, turpentine, and prussian blue if desired.
- *1451. Janzer, C. 25202. 1904.
Rapid drying printers' ink to prevent "set off." Addition of pyroxyline, turpentine, castor oil, alcohol, and ether.
1452. Coterillo y Ojeda, F., and J. QUESADA. 29245. 1904.
Copying ink. Glycerin and syrup added to ordinary ink.
- *1453. Frankenstein, L., and others. 9809. 1905.
J.S.C.I., 1906, v. 25, p. 372.
Rubber solution and color for printing fabrics.
- *1454. Lamb, M. C., and J. D. G. RENNIE. 11049. 1905.
J.S.C.I., 1906, v. 25, p. 636.
Ink for printing on leather. Leather dyes in water, alcohol, benzine, or other hydrocarbon.
- *1455. Hart, J. J. 12128. 1905.
J.S.C.I., 1906, v. 25, p. 691.
Ink for polychromatic printing. Dye, solvent, fullers' earth, china clay, etc.
- *1456. Serck, P. O. 14023. 1905.
Ink for color printing to prevent running or mixing of colors. Balsam, glycerin, myrrh, sandal wood oil, petroleum, turpentine, alcohol, and black oxide of manganese.
- *1457. Lischke, F. A. 14464. 1905.
Ink for printing overlay sheets. Lake color, transparent white, drier, vegetable glue, and varnish.
- *1458. Lamb, M. C., and J. D. G. RENNIE. 17338. 1905.
J.S.C.I., 1906, v. 25, p. 17.
Printers' transfer ink for leather. Addition of petroleum jelly to fat colors used in leather printing.
- *1459. Thorpe, J. F., and BRIGGS & Co. 17793. 1905.
J.S.C.I., 1907, v. 26, p. 16.
Indelible ink for fabrics. "Indigo salt T" used as basis.
- *1460. Longley, W. 19328. 1905.
J.S.C.I., 1906, v. 25, p. 845.
Printers' ink. Color and gelatinous substance prepared from carrageen or similar sea-weed.
- *1461. British Agin Co., and others. 25537. 1905.
Printers' ink from double metallic alginates.
- *1462. Fireman, P. 25859. 1905.
J.S.C.I., 1907, v. 26, p. 57.
Preparation of ferro-ferric oxides for printers' inks.
- *1463. Ippers, J. W. 26965. 1905.
Ink for photo-mechanical printing. Asphalt, resin, beeswax, mastic, tallow, crayon ink.
1464. Morris, E. R., and others. 1732. 1906.
J.S.C.I., 1907, v. 26, p. 58.
Ink for dry copying. Iron perchloride.
- *1465. Lerman, D., and others. 3107. 1906.
J.S.C.I., 1906, v. 25, p. 806.
Printers' ink pigments from coal.
1466. Boulton, A. J. 5050. 1906.
Ink for wood. Water, chinese ink, gum arabic, acetic acid.
1467. Wyse, H. T. 12872. 1906.
J.S.C.I., 1907, v. 26, p. 821.
Sympathetic ink using cobalt salts.
- *1468. Ippers, J. W. 15026. 1906.
Lithographic transfer ink. Resin, asphalt, mastic, beeswax, tallow, crayon ink.
- *1469. Imray, O. 18562. 1906.
J.S.C.I., 1907, v. 26, p. 526.
Gelatin colors for printing from intaglio oiled forms.
- *1470. Lilienfeld, L. 2998. 1907.
J.S.C.I., 1908, v. 27, p. 279.
Ink for producing silk-like effects on paper and textiles. Compounds of viscose with zinc or metals of the magnesium group. See patent no. 14483 of 1903.
1471. Simpson, D. C. 4379. 1907.
Lange, v. 3, p. 221.
Waterproof writing ink. Gum, water, ammonia, black color, dextrin, nigrosin.
1472. Acheson, E. G. 27312. 1907.
J.S.C.I., 1908, v. 27, p. 940.
Deflocculated amorphous substances with oil and varnish.

Patents — Great Britain, continued.

- *1473. Briggs, W. 6702. 1908.
Quick-drying multicolor ink using shellac.
- *1474. Bezzant, S., and R. BEZZANT.
8688. 1908.
J.S.C.I., 1908, v. 27, p. 1029.
Treatment of raw ox-gall for ruling machine ink.
1475. Garzino, L. 9108. 1908.
J.S.C.I., 1908, v. 27, p. 895.
Sympathetic ink which can be press-copied, effaced by a rubber, and then developed. Alkaline solution of yellow prussiate of potash, magnesium carbonate, and graphite. Developer consists of iron, alum, and a mordant of bisulphate of potash.
- 1475a. Claesen, C. 9579. 1908.
J.S.C.I., 1909, v. 28, p. 363.
Hectographic inks using polyglycerins.
- *1476. Binko, H. B., and N. MAYER.
14126. 1908.
Printers' ink. Blue paste obtained by dissolving indigo in sulphuric acid and adding common salt, dextrin and gum.
- *1477. Levy, A. 15339. 1908.
Fireproof and waterproof printers' ink based on magnesite.
- *1478. Holweg, C. 16517. 1908.
Printers' ink. Anilin color dissolved in alcohol.
1479. Elam, E. W. 19588. 1908.
Copying ink. Anilin black, nigrosin, glucose, glycerin, water, potassium hydroxide.
1480. Loevinsohn, E. 22420. 1908.
Ink for transfer papers. Fusible colors, binding materials, and mineral oil.
1481. Soc. Weiluc et Cie. 26469. 1908.
Transfer ink for decorating walls. Non-transparent color, linseed oil, fish glue, castor oil, collodion, india rubber solution, etc.
1482. Mansell, W. F., and W. H. MANSELL.
27233. 1908.
Sensitizing ink for stenciling. Water, silver salt, alcohol, and glycerin.
1483. Lucas, E. G. H. 27957. 1908.
Ink for swelled gelatin process. Linseed oil, beeswax, turpentine, and colors.
- *1484. Walker, F. H., and C. E. SOHN.
2114. 1909.
Oil residuums, crude oils, etc., treated with strong sulphuric acid. Printers' ink by addition of lamp-black or other pigment.
- *1485. Jagenburg, F. G. 4040. 1909.
J.S.C.I., 1910, v. 29, p. 364.
Printers' ink. Color in soap solution is mixed with thickener (china clay, baryta, etc.).
- *1485a. Child, R. C., and J. JOHNSTON.
8532. 1909.
J.S.C.I., 1910, v. 29, p. 288.
Printing inks based on powdered coal.
- *1485b. Hopkins, M. S., and C. R. BARNETT.
13679. 1909.
J.S.C.I., 1910, v. 29, p. 640.
Recovery of ingredients of oily inks.
- *1486. Lilienfeld, L. 15306. 1909.
Printers' ink based on viscose.
1487. Hochstetter, R. 16291. 1909.
J.S.C.I., 1909, v. 28, p. 1211.
Mimeograph ink. Pigment ground in sulphonated oil. Base of barium sulphate or of china clay.
1488. Lamp'l, R., and P. J. LAMP'L.
16636. 1909.
Safety inks, using benzoflavine and chrome alum.
- *1489. Beckmann, F. 20025. 1909.
J.S.C.I., 1910, v. 29, p. 1029.
Adhesives for use in printers' inks for wall papers. Gum arabic, gum tragacanth, flour, dextrin, bittern.
1490. Kasseker, J. 23852. 1909.
J.S.C.I., 1910, v. 29, p. 278; C. A., 1910, v. 4, p. 3289.
Ceramic transfer ink. Linseed oil, lead compound. No flux is required.
1491. Escardo, I. S., and J. B. B. SALA.
27268. 1909.
Safety ink. Invisible impression rendered visible by rubbing with metal. Zinc white and colorless litho varnish.
- *1492. Sureties, C. 29379. 1909.
J.S.C.I., 1911, v. 30, p. 147.
Printers' ink base of yeast.
1493. Newton, P. A. 29460. 1909.
J.S.C.I., 1911, v. 30, p. 141.
Decalcomania ink. Alkali salts of acids obtained by the saponification of oils, fats, waxes, or resins are used for binders.
- *1494. Child, R. C. 7722. 1910.
J.S.C.I., 1911, v. 30, p. 1023.
Printers' ink. Tar and pitch, powdered shale or anthracite.
- 1494a. Cameron, D. 16515. 1910.
J.S.C.I., 1911, v. 30, p. 908.
Copying writing ink. Copy paper contains tannic or gallic acid.
1495. Laza, E. 17886. 1910.
Marking ink for bread wafers which are baked on the bread. Inoffensive color treated with gum solution, saccharin materials, or vegetable juice.
1496. Lorenz, H. W. F. 19156. 1910.
Safety inks containing ingredients sensitive to chemicals usually used for removing writing ink. Several recipes.
1497. Simpson, R. 22237. 1910.
Safety ink. Anilin, glycerin, and ordinary printers' ink.
1498. Flachaire, C. P. 24136. 1910.
Sympathetic ink for advertising. Double iodide of mercury and silver.
1499. Pictet, R. P. 24256. 1910.
J.S.C.I., 1911, v. 30, p. 1044.
Process of producing soot.
1500. Rueter, A. 29389. 1910.
J.S.C.I., 1911, v. 30, p. 1072.
Quick-drying writing ink. Ordinary ink and a neutral volatile substance such as spirits of wine.
1501. Pickstone, J. W. 29735. 1910.
Ink for hand stamps. Anilin dye, dextrin, glycerin.
- *1502. Wechsler, S. 2912. 1911.
Printers' ink for fabrics. Color, glycerin, varnish, and a mixture named "hygrol."

Patents — Great Britain, continued.

1503. Flachaire, C. P. 7318. 1911.

Sympathetic inks. Double iodide of mercury and silver.

*1504. Lilienfeld, L. 14142. 1911.

J.S.C.I., 1912, v. 31, p. 680.

Preparation of poly-fatty acids for printers' inks.

1505. Hurwitz & Co. 17772. 1911.

Copying ink and apparatus for applying. Uses ammoniacal ink and a plate covered with a grape sugar solution.

*1506. Lucas, E. G. H. 18965. 1911.

Ink for photo-mechanical surfaces. Amendment to his specification no. 27957 of 1908.

*1507. Wass, A. 914. 1912.

J.S.C.I., 1913, v. 32, p. 613.

Printers' ink. Mineral oil soot, driers, and agglutinant.

1507a. Badische Anilin und Soda Fabrik. 7892. 1912.

J.S.C.I., 1913, v. 32, p. 226.

Chromium compounds of hydroxyanthraquinone sulphonic acids for use in inks.

*1508. Albert, K., and L. BEREND.

13586. 1912.

J.S.C.I., 1913, v. 32, p. 766.

Printers' ink base. Emulsification of asphalts, hydrocarbons, etc., with concentrated neutralized sulphite cellulose lye.

*1509. Lauthe, O., and C. LAUTHE.

14578. 1912.

Ink for etched plates. Lithographic ink, asphalt, colophony, drop mastic, paraffin, spermaceti, stearine, soap, turpentine.

1510. Thompson, W. P. 16570. 1912.

Ink for carbon papers. Hydrocarbon boiling above 200° C., linseed oil varnish, berlin blue, varnish, milori blue, and indigo.

*1511. Wolff, M. 30037. 1912.

J.S.C.I., 1913, v. 32, p. 1162; C. A., 1914, v. 8, p. 2072; Cent., 1914, Jahrg. 85, Teil 1, p. 722.

Drained peat or other fibrous vegetable material treated with alkali and used as basis for printers' ink.

*1512. Ransford, R. B. 714. 1913.

J.S.C.I., 1914, v. 33, p. 74.

Printers' ink for textiles based on phenol and formaldehyde.

1513. Turkin, N. W. 5737. 1913.

J.S.C.I., 1914, v. 33, p. 742.

Pigments based on turkey red oil and an alkali.

*1514. Heyl, G. E., and T. T. BAKER.

10055. 1913.

J.S.C.I., 1914, v. 33, p. 604; C. A., 1914, v. 8, p. 3507.

Drier for printers' ink. Sodium amyl sulphate.

*1515. Schuetze, L., and R. FISCHER.

12567. 1913.

J.S.C.I., 1913, v. 32, p. 1007; C. A., 1914, v. 8, p. 3722.

Printers' ink for engraved surfaces. Color, emulsion of albumin in alkaline solution, sulphonated oil or salt thereof.

1516. Pindikowsky, A. 13723. 1913.

Stencil ink. Color and cornflower paste.

*1517. Sureties, H. 14245. 1913.

J. S.C.I., 1914, v. 33, p. 798.

Printers' ink based on peat.

*1518. Turkin, N. W. 23128-23129. 1913.

J.S.C.I., 1914, v. 33, p. 747, 757.

Printing colors. See specification no. 5737 of 1913.

*1519. Quick, A. S. 547. 1914.

Residue from spent lyes for printers' inks.

*1520. Lilienfeld, L. 3370. 1914.

Carbohydrate ethers for printers' inks.

*1521. Wolff, M. 4419. 1914.

J.S.C.I., 1915, v. 34, p. 145.

Printers' ink. Ingredients are mixed cold and without intercedent drying.

*1522. Farbwerke, vorm. Meister, Lucius, & Brüning. 5011. 1914.

J.S.C.I., 1914, v. 33, p. 829.

Printers' ink for fabrics. Reduction dyes and varnish.

1523. Travers, S. 5363. 1915.

Ink for lantern slides. Dissolved gum and color.

*1524. Justice, P. M. 7284. 1915.

Printers' ink for fabrics. Water-soluble phenol-formaldehyde condensation products.

*1525. Lipsius, S. 10089. 1915.

Printing in imitation of embossed work. Fusible gum deposited on freshly printed characters.

*1526. Stevenson, J. 104429. 1917.

J.S.C.I., 1917, v. 38, p. 463.

Printers' ink for stencil duplication. Calcium chloride, gum, lampblack or other inert color.

1527. Singer, L. 109270. 1917.

Treating acid resins from oil purification.

*1528. Soc. Anon. la Photogravure Rotative, and Soc. THENARD SIMON ET CIE. 111279. 1917.

Ink for intaglio printing.

1529. Akashi, K. 114601. 1918.

J.S.C.I., 1918, v. 38, p. 313a.

Solid ink. Dye, dextrin, gum tragacanth, thymol, lactic acid.

*1530. Jager, G. C., and R. W. CARL.

116109. 1918.

J.S.C.I., 1918, v. 37, p. 464a.

Printers' ink for rotary presses. Based on hexamethylenetetramine, or other substance yielding formaldehyde.

*1531. Hope, J. 117023. 1918.

J.S.C.I., 1918, v. 37, p. 554a.

Use of sulphur colors in printers' ink.

1532. Shinozaki, M. 117117. 1918.

J.S.C.I., 1918, v. 37, p. 554a.

Indelible writing ink. Lampblack, alkali, soluble indulin.

1533. Schmidt, E. E. 130319. 1919.

Safety writing ink. Colloidal solution of prussian blue, oxalic acid, epsom salts, turkey red oil.

Patents — Great Britain, continued.

- *1534. Duke, J. F. 131769. 1919.
J.S.C.I., 1919, v. 38, p. 834a.
Printers' ink. Carbohydrate, tannic or other acid, and iron salt.
1535. Tsutsumi, M. 141631. 1920.
J.S.C.I., 1920, v. 39, p. 459a.
Solid writing ink. Logwood, galls, potassium ferrous tartrate, color, sodium salicylate, antiseptic, and gum arabic.
1536. Allison, C. A. 146676. 1920.
J.S.C.I., 1920, v. 39, p. 602a.
Non-corrosive ink. Borax and dextrin.
- *1537. Nelson, R. N. 148650. 1920.
Printers' ink for textiles. Addition to lithographic ink of terebine and gold size.
- *1538. Lilienfeld, L. 149319. 1920.
J.S.C.I., 1922, v. 41, p. 95a.
Thickener for printers' ink. Carbohydrates of formula $C_6H_{10}O_5$ mixed with oily liquids obtained when acetylene reacts with aluminium chloride.
- *1539. Serafin, G. 149373. 1920.
Lithographic ink.
1540. Oleson, J. C. 152465. 1920.
Ink rod. Water soluble anilin dye, graphite or kaolin, and a binder.
- *1541. Chemische Fabriken Worms. Akt. Ges. 156212. 1921.
J.S.C.I., 1921, v. 40, p. 520a.
Substitution of lactate solutions for glycerin in stamping and printing inks.
- *1542. Fitzgerald, F. C. 159809. 1921.
Lithographic ink avoiding necessity of damping stone. Adds grease resisting materials.
- *1543. Hinely, T. H. 161700. 1921.
Printers' ink for knotted goods. Colors, litho varnish, tallow, stearine, and paraffin wax.
- *1544. Ruetgerswerke Akt. Ges. 166117. 1921.
J.S.C.I., 1922, v. 41, p. 559a.
Printers' black ink with basis of tar oil derived from wood, peat, straw, cotton, or other fibrous material.
- *1545. Parry, R. H. 169917. 1921.
J.S.C.I., 1921, v. 40, p. 858a.
Ruling inks and bookbinders' colors. Evaporation of ox-gall and a salt.
- *1546. Lilienfeld, L. 171661. 1921.
J.S.C.I., 1922, v. 41, p. 53a.
Coumaron resins for printers' inks. See specification no. 163271.
1547. Schiffmann, J. 172588. 1921.
J.S.C.I., 1922, v. 41, p. 66a.
Stamping pad ink. Tannate or gallate (or both) of iron, acetin, color.
- *1548. Aurich, E., and F. WOLF. 176599. 1922.
Lithographic ink for producing a light color on a dark ground, using rapid-drying grease resisting ink.
- *1549. Monberg, J. 177515. 1922.
Resist ink used in producing simultaneously a number of plates similar to an original. Addition of wax, glycerin, and india ink to printing ink.
- *1550. Lilienfeld, L. 181393, 181395. 1922.
J.S.C.I., 1923, v. 42, p. 1126a.
Printers' ink based on alkyl ethers of cellulose.
- *1551. De Waele, A. 183513. 1922.
J.S.C.I., 1922, v. 41, p. 771a.
Printers' ink based on emulsion in form of plastic solid, of which the yield value is greater than the emulsion of the components.
1552. Plausons, Ltd. 184880. 1922.
J.S.C.I., 1922, v. 41, p. 815a.
Colloidal inks based on refined clay.
- *1553. Smidt, K. J., and R. JAEGER. 187537. 1922.
J.S.C.I., 1922, v. 41, p. 989a.
Printers' ink from waste sulphite-cellulose lyes, nitric acid, and a catalyst.
1554. Plausons, Ltd. 187732. 1922.
J.S.C.I., 1922, v. 41, p. 989a.
Colloidal inks based on clay.
- *1555. Marr, R. A. 189271. 1922.
J.S.C.I., 1923, v. 42, p. 51a.
Reclaiming printed paper.
1556. Naamlooze Vennootschap Philips Gloelampenfabriken. 189763. 1922.
Ink for transparent markings on frosted glass.
1557. Bretton, J. H. M. 190232. 1922.
J.S.C.I., 1923, v. 42, p. 151a.
Marking ink. Based on juice of *Semecarpus ana-cardium*.

FRANCE

The Library has specifications, 1902–date. The abstracts published 1791–1900 are in some cases title entries only.

1558. Cellier. 177. 1805.
Des., série 1, tome 3, p. 97.
Galls, nitrate of iron, gum arabic, animal carbon.
- *1559. Stone, and others. 553. 1808.
Des., série 1, tome 7, p. 197.
Printers' ink for ceramics, ivory, etc. Carbonate of manganese, carbonate of copper, and Swedish cobalt.
- *1560. Legros d'Anizy. 875. 1808.
Des., série 1, tome 10, p. 121.
Lithographic ink. Carbonates of manganese and copper, and Swedish cobalt.
1561. Mery. 619. 1814.
Des., série 1, tome 8, p. 75.
Ink for terra cotta.

Patents—France, continued.

- *1562. **Seib.** 1095. 1820.
Des., série 1, tome 12, p. 90.
Lithographic ink for textile printing. Wax, shellac, narsix, soap, lampblack.
1563. **Dumoulin, S.** 1883. 1821.
Des., série 1, tome 21, p. 286.
Acid-and-alkali proof ink. Subcarbonate of soda, resin, wax, glue, hydrochloric acid.
1564. **Delunel.** 3273. 1821.
Des., série 1, tome 33, p. 319.
Indelible writing ink. Glue, starch, hydrochloric acid, soap, lampblack, licorice extract, chloride of lime.
1565. **Minet.** 1355. 1822.
Des., série 1, tome 14, p. 352.
Dry and liquid acid resisting ink. Brazil wood, galls, sulphate of iron, gum arabic, vinegar, alum, carbon.
- *1566. **Bergounioux, A. A. H.** 3872. 1823.
Des., série 1, tome 38, p. 418.
Printers' ink, using black from schist, etc.
1567. **Hunt, H.** 2464. 1828.
Des., série 1, tome 27, p. 144.
Writing ink. Galls, campeche, gum arabic, copers, blue vitriol, sugar, ammonia, alcohol, water.
1568. **Dizé, M. J. J.** 2655. 1829.
Des., série 1, tome 28, p. 290.
Safety writing ink. Printers' ink, subcarbonate of soda, water, lacquer, glue.
1569. **Fesneau-Petibeau.** 3950. 1832.
Des., série 1, tome 39, p. 260.
Indelible writing ink. Galls, water, india-wood, gum arabic, sulphate of iron, essence of lavender, sugar, alum, lampblack.
- *1570. **Mozard, P.** 3953. 1834.
Des., série 1, tome 39, p. 265.
Printers' ink in colors. Linseed oil, resin, silver chromate.
1571. **Perry, J.** 4316. 1834.
Des., série 1, tome 41, p. 380.
Concentrated non-corrosive drawing and copying ink. Galls, iron sulphate, india-wood, sugar, gum arabic, indigo, hydro-chlorate of ammonia, essence of lavender, essence of lemon, acetic acid, cyanide of potassium.
1572. **Guillier, J.** 9701. 1834.
Des., série 1, tome 69, p. 491.
Indelible marking ink. Silver nitrate, water, gum arabic, sub-carbonate of soda, ammonia.
1573. **Elia, N. V. M.** 4170. 1836.
Des., série 1, tome 40, p. 434.
Blue-black writing ink. Indigo, sulphuric acid, hydrosulphuric acid, water.
- *1574. **Bazin, F. C.** 4813. 1837.
Des., série 1, tome 44, p. 179.
Printers' ink for leather and parchment. Several recipes.
1575. **Miles-Berry.** 10982. 1837.
Des., série 1, tome 79, p. 286.
Writing ink. Oxalic acid, prussian blue, water.
1576. **Dunand, M.** 6118. 1838.
Des., série 1, tome 51, p. 127.
Indelible marking ink. Silver nitrate, gum arabic, water, lampblack.
- *1577. **Niboyet, E.** 9396. 1838.
Des., série 1, tome 68, p. 104.
Printers' ink using green soap instead of usual siccatives.
1578. **Dufay, A. E.** 5858. 1840.
Des., série 1, tome 49, p. 386.
Safety writing paper impregnated with sulphate of iron and gall.
1579. **Prudon, B.** 5889. 1840.
Des., série 1, tome 49, p. 449.
Imitation of india ink. Mixes black with gelatin.
1580. **Bagatta, J.** 6299. 1840.
Des., série 1, tome 52, p. 144.
Indelible writing ink. Water, lampblack, caustic potash, oak bark, galls, madder, campeche, sugar, iron sulphate, gum arabic, indigo sulphate.
- *1581. **Pernel, L. C.** 6448. 1840.
Des., série 1, tome 52, p. 517.
Printers' ink for leather. Linseed oil, galipot, sandarac.
1582. **Bezanger, J. J. M.** 10124. 1840.
Des., série 1, tome 72, p. 182.
Indelible writing ink. Carbon, glue, caustic soda, gum.
1583. **Bowry de Pregny, H.** 6685. 1841.
Des., série 1, tome 54, p. 95.
Writing copying ink. Galls, campeche, marshmallow root, iron sulphate, copper sulphate, gum arabic, sugar.
- *1584. **Goyneau, C. J. M. A.** 6845. 1842.
Des., série 1, tome 54, p. 410.
Printers' ink. Linseed oil, rosin, molasses, litharge, carbon.
- *1585. **Wagner, P.** 8663. 1842.
Des., série 1, tome 64, p. 134.
Lithographic ink for waxed surfaces or leather. Linseed oil, turpentine, carbonate of lead.
- *1586. **Knecht, and ZUBER.** 12199. 1842.
Des., série 1, tome 90, p. 106.
Ink for lithographic and metal surfaces. Yellow wax, tallow, gum, colophane, pitch, and varnish.
1587. **Levrault, J.** 9485. 1843.
Des., série 1, tome 68, p. 444.
Indelible writing ink. Carbon, indigo, glue, ammonia, hydrochloric acid.
1588. **Hély, A. A.** 8096. 1844.
Des., série 1, tome 61, p. 127.
Metallic writing ink. Gum arabic, water, gum ammoniac, metal powder.
- *1589. **Boudon de Saint-Amans.** 11448. 1844.
Des., série 1, tome 83, p. 18.
Printers' ink for ceramics.
1590. **Thabuy, and DUFEU.** 879. 1845.
Des., série 2, tome 4, p. 199.
Indelible writing ink. Linseed oil, bitumen, turpentine, carbon or color.

Patents—France, continued.

- 1591. Roseleur, and LANAUX.** 1618. 1846.
Des., série 2, tome 6, p. 193.
Indelible writing ink. Linseed oil, bitumen, carbonate of potash, turpentine.
- 1592. Faucher.** 3422. 1847.
Des., série 2, tome 12, p. 316.
Writing ink. Galls, gum arabic, alum, sugar, green copperas, vitriol.
- 1593. Guillier.** 4125. 1849.
Des., série 2, tome 15, p. 7.
Violet writing ink. Chloride of gold, water, tin salt, gum arabic.
- 1594. Simon.** 4484. 1849.
Des., série 2, tome 16, p. 36.
Ink tablets. Iron salt, galls, copper salt, gum arabic, sugar, alum.
- 1595. Kopczynski.** 5414. 1850.
Des., série 2, tome 18, p. 329.
Safety writing ink. Specifications not given.
- 1596. Houtret.** 6188. 1851.
Des., série 2, tome 20, p. 318.
Indelible writing ink. Gum, borax, indigo, prussian blue, carbon, water.
- 1597. Trouble.** 6557. 1852.
Des., série 2, tome 21, p. 314.
Stamping ink based on oleic acid.
- *1598. Lefevre.** 6779. 1852.
Des., série 2, tome 22, p. 275.
Printers' ink for leather. Uses vinegar and albumin.
- 1599. Haas.** 6842. 1852.
Des., série 2, tome 22, p. 310.
Liquid india ink. Alum, fish glue, black color, alcohol.
- *1600. Sapène-Gays.** 7864. 1853.
Des., série 2, tome 25, p. 362.
Printers' ink for glass. Lithographic varnish, alcohol, pine resin.
- 1601. Fourmentin.** 7883. 1853.
Des., série 2, tome 25, p. 385.
Indelible writing ink based on chromium oxide.
- 1602. Armange.** 9597. 1853.
Des., série 2, tome 32, p. 5.
Employs juice of the *Karak-kailou* for black writing fluid.
- 1603. Poncelet.** 9716. 1854.
Des., série 2, tome 32, p. 314.
Non-corrosive writing ink. India-wood, galls, chromate of potassium, catechu.
- 1604. Romégon.** 9798. 1854.
Des., série 2, tome 32, p. 4000.
Non-corrosive writing ink. Campeche, water, bichromate of calcium (or other bichromates).
- 1605. Larenaudière.** 11156. 1854.
Des., série 2, tome 38, p. 310.
Copying writing ink. Campeche, water, alum, copper sulphate.
- 1606. Jublin.** 12191. 1855.
Des., série 2, tome 42, p. 318.
Colorless writing ink that turns blue on prepared paper. Water, proto-chloride of iron, phosphoric acid, hydrochloric acid, nitrate of iron.
- 1607. Ballande, J. A. H.** 12197. 1855.
Des., série 2, tome 42, p. 319.
Colorless writing ink that becomes colored on prepared paper. Iodide, water, gum, gallic acid, pyrogalllic acid, acetic acid, ferro-cyanid of potassium, alkaline sulphides.
- *1608. Gillet, and TABOURIN.** 12678. 1855.
Des., série 2, tome 44, p. 305.
Printers' ink based on henna.
- *1609. Chaffée.** 12883. 1855.
Des., série 2, tome 45, p. 267.
Printers' ink using rubber solution.
- *1610. Boutry.** 14125. 1855.
Des., série 2, tome 50, p. 321.
Ceramic printers' ink.
- *1611. Defay.** 14842. 1856.
Des., série 2, tome 53, p. 157.
Printers' ink based on albumin.
- 1612. Leonhardi, A.** 15123. 1856.
Des., série 2, tome 54, p. 97; Ding., 1856, Jahrg. 142, p. 141; Poly. Cent., 1856, Jahrg. 22, p. 1472.
Alizarin writing ink. Galls, madder, indigo, iron sulphate, pyroacetate (or pyrolignite) of iron, water.
- 1613. Rapp.** 15936. 1856.
Des., série 2, tome 56, p. 6.
Writing ink extract and powder. Campeche, potassium chromate, water. For powder, campeche, iron sulphate, sugar, and creosote.
- 1614. Brun.** 16672. 1856.
Des., série 2, tome 57, p. 319.
Writing ink based on acetic acid.
- *1615. Underwood, J., and F. V. BURT.** 16680. 1856.
Des., série 2, tome 57, p. 326.
Printers' copying ink. Galls, iron sulphate, gum, molasses, soap, carbon, prussian blue, water.
- 1616. Kessler.** 17038. 1856.
Des., série 2, tome 58, p. 393.
Ceramic ink.
- *1617. Seropyan.** 18528. 1857.
Des., série 2, tome 62, p. 246.
Safety printers' ink. Alkali, iron sulphate, gallic acid, linseed oil.
- 1618. Belmondi.** 21283. 1858.
Des., série 2, tome 68, p. 377.
Non-corrosive writing ink. Carbonate of potassium, nitrate of potassium, carbonate of lead, carbonate of manganese, water.
- *1619. Lemaire.** 21386. 1858.
Des., série 2, tome 69, p. 27.
Printers' ink with aluminium base.
- 1620. Ballande, J. A. H.** 22346. 1859.
Des., série 2, tome 70, p. 264.
White writing ink that becomes black on prepared paper.

Patents — France, continued.

1621. Jolicoeur. 23167. 1859.

Des., série 2, tome 72, p. 23.

Indelible marking ink. Linseed oil, caoutchouc, carbon, turpentine.

1622. Melville. 25506. 1860.

Des., série 2, tome 75, p. 296.

Indelible marking ink. Gum, soap, alum, bitumen, vegetable black.

*1623. Lambert. 26352. 1860.

Des., série 2, tome 77, p. 332.

De-inking process.

1624. Magneval. 49596. 1861.

Des., série 2, tome 81, cl. 18, pt. 2, p. 2.

Solid ink.

1625. Paviet-Germanoz. 49754. 1861.

Des., série 2, tome 81, cl. 14, pt. 3, p. 7.

Indelible marking ink using neutral tartrate of silver.

1626. Croc, L. 51016. 1861.

Des., série 2, tome 81, cl. 14, pt. 2, p. 8.

Anilin writing ink. Anilin violet, red anilin or fuchsine, anilin blue, chinese ink, gluten, acetic acid.

*1627. Tessié du Motay, and MARÉCHAL.

51759. 1861.

Des., série 2, tome 81, Arts industriels, pt. 2, p. 10.

Printers' ink for glass.

1628. Ancelle. 52529. 1862.

Des., série 2, tome 83, cl. 14, pt. 2, p. 1.

Red writing copy ink. Cochineal, water, carbonate of soda, alum, aminonia, gum, sugar.

1629. Croc, L. 52878. 1862.

Des., série 2, tome 84, cl. 12, pt. 4, p. 35;

Wag. Jahr., 1862, Jahrg. 8, p. 606.

Morse telegraph ink. Title entry only.

1630. Sigur, and CREMER. 52927. 1862.

Des., série 2, tome 83, cl. 17, pt. 1, p. 12.

Decalcomania ink.

1631. Nadaud. 52984. 1862.

Des., série 2, tome 83, cl. 14, pt. 2, p. 1.

Red or violet writing ink based on fuchsine and anilin.

*1632. Maréchal, and TESSIÉ DU MOTAY.

53103. 1862.

Des., série 2, tome 82, Ceramique, pt. 3, p. 3.

Printers' ink for ceramics and glass.

1633. Bazen, and DELENTE. 59600. 1863.

Des., série 2, tome 85, cl. 14, pt. 3, p. 23.

Hygienic ink. Title entry only.

*1634. Hunt. 61151. 1863.

Des., série 2, tome 86, cl. 17, pt. 2, p. 27.

Safety printers' ink based on peroxide of tin and oxide of chromium.

*1635. Hulot. 66609. 1865.

Des., série 2, tome 94, cl. 17, pt. 2, p. 31.

Printers' ink. Title entry only.

*1636. Rowley. 67383. 1865.

Des., série 2, tome 93, cl. 14, pt. 3, p. 25.

Printers' ink. Title entry only.

1637. Rozé. 68040. 1865.

Des., série 2, tome 93, cl. 14, pt. 3, p. 26.

Writing ink. Title entry only.

1638. Ellis. 70626. 1866.

Des., série 2, v. 97, cl. 14, pt. 3, p. 14.

Silicious compounds for colors. Title entry only.

1639. Roy. 70964. 1866.

Des., série 2, v. 97, cl. 14, pt. 3, p. 15.

Writing ink. Title entry only.

1640. Varin. 72912. 1866.

Des., série 2, tome 97, cl. 14, pt. 3, p. 16.

Graphite copying ink (writing). Title entry only.

*1641. Rave. 73664. 1866.

Des., série 2, tome 98, cl. 17, pt. 2, p. 13.

Belgian printers' ink. Title entry only.

*1642. Ollion. 73701. 1866.

Des., série 2, tome 98, Arts industriels, pt. 2, p. 12.

Engraving ink using bichromate of potassium and an acid.

1643. Roy. 80612. 1868.

Des., série 2, tome 105, cl. 14, pt. 2, p. 4.

Writing ink. Title entry only.

1644. Huot. 84696. 1869.

Des., série 2, tome 109, cl. 14, pt. 2, p. 1.

Manufacture of lamplblack.

1645. Cooke. 85050. 1869.

Des., série 2, tome 109, cl. 14, pt. 2, p. 9.

Writing copying ink. Title entry only.

*1646. Muller. 86613. 1869.

Des., série 2, tome 109, cl. 14, pt. 2, p. 10.

Copper plate and printers' ink. Title entry only.

*1647. Kircher, J., and E. EBNER.

86725. 1869.

Des., série 2, tome 109, cl. 14, pt. 3, p. 23.

Erasable printing ink. Title entry only.

1648. Mendes. 86731. 1869.

Des., série 2, tome 109, cl. 14, pt. 3, p. 23.

Sympathetic ink. Title entry only.

1649. Dutilh. 88248. 1869.

Des., série 2, tome 112, cl. 4, pt. 2, p. 34.

Cleaning ink-stains with chlorine. Title entry only.

1650. Delidon. 93824. 1872.

Des., série 3, tome 3, Papeterie, pt. 2, p. 2; Ber., 1873, Bd. 6, p. 156; Bull. Soc. Chim., 1873, v. 19, p. 141.

Writing copying ink. Black ink, gall (or color), copper sulphate, campeche, water, molasses, alcohol, gum arabic.

1651. Mante. 97067. 1872.

Des., série 3, tome 4, Arts industriels, pt. 2, p. 35.

Autographic ink. Chinese ink, bichromate of potash (or of ammonia), gum or gelatin.

Patents—France, continued.

- *1652. **Nathieu** (dit Plessy). 99427. 1873.
Des., série 3, tome 6, Arts chimiques, pt. 2, p. 4.
Writing and printing ink. Organic color in solution and addition of substance which favors carbonization by heat.
1653. **Puttemans**. 99628. 1873.
Des., série 3, tome 6, Arts chimiques, pt. 2, p. 8.
Indelible ink. Title entry only.
- *1654. **Persoz, J., and L. JEANNOLLE**. 101019. 1873.
Des., série 3, tome 6, Arts chimiques, pt. 2, p. 7.
Printers' ink. Resin liquid, carbon, prussian blue, glycerin.
1655. **Pinkney, R.** 102050. 1874.
Des., série 3, tome 13, Arts textiles, pt. 2, p. 12.
Anilin writing ink.
1656. **Souvignet**. 102244. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 3, p. 32.
Erasing ink spots with sodium chlorate. Title entry only.
- *1657. **Roman**. 102341. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 3, p. 5.
Printers' delible ink using glycerin.
1658. **Richoux, and GONTHIER-DREYFUS**. 102836. 1874.
Des., série 3, tome 10, Arts chimiques pt. 3, p. 32.
Writing ink. Title entry only.
1659. **McIlvaine, C. M.** 102901. 1874.
Des., série 3, tome 10, Arts chimiques, cl. 3, p. 32.
Writing ink. Title entry only.
1660. **Gaffard**. 103352. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 3, p. 32.
No indication of character of ink. Title entry only.
1661. **Cré**. 103376. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 3, p. 32.
No indication of character of ink. Title entry only.
1662. **Ballande, J. A. H.** 104329. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 3, p. 18.
White writing ink for special paper. Iodide of potassium and gum.
- *1663. **Platel**. 104614. 1874.
Des., série 3, tome 11, Arts industriels, pt. 2, p. 35.
Black printers' ink. Tannin, glycerin, essence of thyme, gum, glucose, iron salts.
1664. **Metra**. 105174. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 2, p. 7.
Pink and red writing inks using saffranine.
1665. **Delidon**. 105290. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 3, p. 33.
No indication of character of ink. Title entry only.
1666. **Gaudin**. 106052. 1874.
Des., série 3, tome 10, Arts chimiques, pt. 3, p. 31.
Safety writing ink. Carbon, gelatinous tannate, prussian blue.
- 1666a. **Lothar de Faber**. 106181. 1874.
Des., série 3, tome 10, Papeterie, pt. 2, p. 12; Wag. Jahr., 1875, Jahrg. 21, p. 996.
Copying pencils. Anilin, graphite, and kaolin.
- *1667. **Billet, and MICHEL**. 106362. 1875.
Des., série 3, tome 14, Arts chimiques, pt. 3, p. 3.
Substitution of vinasse for molasses in manufacture of printers' ink.
1668. **Devillers**. 107133. 1875.
Des., série 3, tome 14, Arts chimiques, pt. 2, p. 1.
Paste composition. Water, campeche, alum, anilin.
1669. **Gaudin**. 107267. 1875.
Des., série 3, tome 17, Arts textiles, pt. 2, p. 56.
Indelible marking ink. Title entry only.
1670. **Grawitz, W. J. S.** 108460. 1875.
Des., série 3, tome 14, Arts chimiques, pt. 3, p. 10; Wag. Jahr., 1876, Jahrg. 22, p. 1065; Bull. Soc. chim., 1876, v. 26, p. 425.
Powdered ink from silicates and aluminates.
1671. **Messemer**. 110848. 1875.
Des., série 3, tome 14, Arts chimiques, pt. 3, p. 20.
Concentrated ink. Title entry only.
1672. **Zuccato, E. de**. 113564. 1876.
Des., série 3, tome 19, Arts industriels, pt. 2, p. 60.
Copying writing ink and apparatus. Caustic liquid, anilin, glycerin.
1673. **Denis**. 115818. 1876.
Des., série 3, tome 18, Arts chimiques, pt. 4, p. 67.
Compound for removing ink stains. Title entry only.
1674. **Escoffier**. 117156. 1877.
Des., série 3, tome 22, Arts chimiques, pt. 3, p. 22.
Copying ink. Title entry only.
1675. **Brachet**. 120736. 1877.
Des., série 3, tome 22, Arts chimiques, pt. 3, p. 23.
Ink powder. Title entry only.
1676. **Fargue**. 121433. 1877.
Des., série 3, tome 22, Papeterie, pt. 2, p. 21.
Safety writing ink. Title entry only.

Patents — France, continued.

- 1677. Zuccato, E. de.** 121744. 1877.
Des., série 3, tome 22, Papeterie, pt. 2, p. 22.
Copying ink. Title entry only.
- 1678. Devillers.** 124450. 1878.
Des., série 3, tome 26, Arts chimiques, pt. 3, p. 9, with certificate of addition (title only) in série 3, tome 30, Arts chimiques, pt. 2, p. 9.
Concentrated ink using campeche and chromium.
- 1679. Richmond.** 125522. 1878.
Des., série 3, tome 26, Arts chimiques, pt. 3, p. 20.
Indelible writing ink. Title entry only.
- 1680. Garnier.** 126159. 1878.
Des., série 3, tome 26, Arts chimiques, pt. 3, p. 21.
Writing ink. Title entry only.
- 1681. Kwaysser, and HUSAK.** 127373. 1878.
Des., série 3, tome 26, Papeterie, pt. 2, p. 21.
Writing copying ink using anilin and alcohol.
- 1682. Fargue.** 127461. 1878.
Des., série 3, tome 26, Papeterie, pt. 2, p. 31.
Writing ink grains. Title entry only.
- *1683. Gunther.** 133676. 1879.
Des., série 3, tome 35, Arts industriels, pt. 2, p. 51.
Black printing ink. Title entry only.
- *1684. Wilhelm, J. J., and F. ROHNSTADT.** 134281. 1879.
Des., série 3, tome 30, Arts chimiques, pt. 2, p. 9.
Printers' ink. Title entry only.
- 1685. Bouilhon, and GUASCO.** 135211. 1880.
Des., série 3, tome 34, Papeterie, pt. 2, p. 33.
Ink pencil. Title entry only.
- 1686. Lacroix, and BELLER.** 136203. 1880.
Des., série 3, tome 34, Arts chimiques, pt. 2, p. 9.
Ink powder. Title entry only.
- *1687. Teilliet.** 138069. 1880.
Des., série 3, tome 35, Arts industriels, pt. 2, p. 52; série 3, tome 39, Arts industriels, pt. 2, p. 54; série 3, tome 43, Arts industriels, pt. 2, p. 42.
Lithographic ink. Title entry only.
- 1688. Gallice.** 138204. 1880.
Des., série 3, tome 34, Papeterie, pt. 2, p. 34.
Solid ink. Title entry only.
- 1689. Magne, J. J.** 138392. 1880.
Des., série 3, tome 35, Arts industriels, pt. 2, p. 16.
Drawing and writing ink. Title entry only.
- 1690. Gruenwald, L.** 141567. 1881.
Des., série 3, tome 35, Arts industriels, pt. 2, p. 16.
Copying writing ink. Title entry only.
- *1691. Brackebusch, H.** 141802. 1881.
Des., série 3, tome 35, Arts industriels, pt. 2, p. 16.
Printers' ink. Title entry only.
- 1691a. Savy.** 143829. 1881.
Des., série 3, tome 41, pt. 1, Arts textiles, pt. 2, p. 25; J.S.C.I., 1882, v. 1, p. 182.
Ink for stamping tissues before dyeing. Linseed oil, massicot, asphalt, gum copal, vermilion.
- 1692. Devillers.** 144336. 1881.
Des., série 3, tome 35, Arts industriels, pt. 2, p. 17.
Black writing ink. Title entry only.
- 1693. Piallat.** 146679. 1882.
Des., série 3, Arts chimiques, pt. 2, p. 16.
Black indelible writing ink. Title entry only.
- *1694. Schmidt.** 149876. 1882.
Des., série 3, tome 42, Arts chimiques, pt. 2, p. 18.
Printers' and stamping ink. Title entry only.
- 1695. Boyeux, and GEOFFRAY.** 149943. 1882.
Des., série 3, tome 42, Arts chimiques, pt. 2, p. 16.
Hygienic ink. Title entry only.
- 1696. Delaye et Cie.** 150996. 1882.
Des., série 3, tome 42, Arts chimiques, pt. 2, p. 16.
Copying writing ink. Title entry only.
- 1697. Meyer.** 153104. 1883.
Des., série 3, tome 46, Arts chimiques, pt. 2, p. 8.
Incombustible ink. Title entry only.
- 1698. Fonseca et Cie.** 153685. 1883.
Des., série 3, tome 46, Arts chimiques, pt. 2, p. 8.
Indelible ink. Title entry only.
- *1699. Nesbit, A. A.** 153913. 1883.
Des., série 3, tome 46, Arts chimiques, pt. 2, p. 8.
Printers' ink for checks and postage stamps. Title entry only.
- *1700. Gard, W. G., and T. H. COBLEY.** 158738. 1883.
Des., série 3, tome 46, Arts chimiques, pt. 2, p. 9.
Black printers' ink. Title entry only.
- *1701. Guillaume.** 165137. 1884.
Des., série 3, tome 51, Arts industriels, pt. 2, p. 35.
Printers' and lithographic ink. Title entry only.
- 1702. Dagron et Cie.** 166145. 1884.
Des., série 3, tome 50, Arts chimiques, pt. 2, p. 15.
Writing ink. Title entry only.

Patents—France, continued.

- *1703. Collin, and ERRANI. 178391. 1886.
Des., série 3, tome 58, Arts chimiques, pt. 2, p. 7.
Printers' ink. Title entry only.
- *1704. Lancelot. 180969. 1887.
Des., série 3, tome 62, Arts chimiques, pt. 2, p. 29.
Printers' ink. Title entry only.
- *1705. Pouchot. 187146. 1887.
Des., série 3, tome 62, Arts chimiques, pt. 2, p. 30.
Non-corrosive writing ink. Title entry only.
- *1706. Stanchfield, G. M. 187482. 1887.
Des., série 3, tome 62, Arts chimiques, pt. 2, p. 30.
Reducer for printers' ink. Title entry only.
- *1707. Mourlot. 196815. 1889.
Des., série 3, tome 70, Arts chimiques, pt. 2, p. 50.
Printers' ink. Title entry only.
- *1708. Macé, and PEREZ. 197370. 1889.
Des., série 3, tome 70, Arts chimiques, pt. 2, p. 50.
Printers' ink. Title entry only.
1709. Dimitry, C. P. 199114. 1889.
Des., série 3, tome 70, Arts chimiques, pt. 2, p. 51.
Indelible writing ink. Title entry only.
- *1710. Holt. 201070. 1889.
Des., série 3, tome 70, Arts chimiques, pt. 2, p. 51.
Printers' inks. Title entry only.
- *1711. Callmann. 202664. 1889.
Des., série 3, tome 70, Arts chimiques, pt. 2, p. 52.
Printers' black ink. Title entry only.
1712. Muller. 205645. 1890.
Des., série 3, tome 74, Arts chimiques, pt. 2, p. 67.
Ink paste. Title entry only.
1713. Boyeux, and CANTON. 206717. 1890.
Des., série 3, tome 74, Arts chimiques, pt. 2, p. 67.
Incombustible ink. Title entry only.
1714. Coën, E. 206996. 1890.
Des., série 3, tome 74, Arts chimiques, pt. 2, p. 67.
Copying writing ink. Title entry only.
- *1715. Higgins, C. M. 208687-88. 1890.
Des., série 3, tome 74, Arts chimiques, pt. 2, p. 68.
Printers' ink. Title entry only.
- *1716. Higgins, C. M. 218495. 1892.
Des., série 3, tome 82, Arts chimiques, pt. 2, p. 81.
Printers' ink. Title entry only.
- *1717. Bibby, J., and J. BIBBY. 231670. 1893.
Des., série 3, tome 86, Arts chimiques, pt. 2, p. 103.
Printers' ink. Title entry only.
- *1718. Tognola, and GUNTHER. 249250. 1895.
Des., série 3, tome 94, Arts chimiques, pt. 2, p. 96.
Printers' and lithographic ink. Title entry only.
1719. Testud de Beauregard. 258935. 1896.
Des., série 3, tome 98, Arts chimiques, pt. 2, p. 68.
Sympathetic ink. Title entry only.
- 1719a. Anquetil. 269793. 1897.
Library lacks specification. See Rev. chim. indus., 1898, tome 9, p. 31.
Copying writing ink. Anilin color, water, glycerin, and alum.
- 1719b. Lichtentag, I. 283244. 1898.
Library lacks specification. See Rev. chim. indus., 1899, tome 10, p. 118.
Method of mixing lampblack with soap.
- 1719c. Grawitz, W. J. S. 276397. 1898.
Mon. sc. B., 1899, série 4, v. 13, p. 15.
Marking inks. Anilin base.
1720. Morin. 304982. 1900.
Library lacks specification. See Rev. chim. indus., 1901, tome 12, p. 90.
Ink tablets.
1721. Bounot. 311189. 1901.
Library lacks specification. See Rev. chim. indus., 1901, tome 12, p. 361.
Quick drying and copying ink. To black writing ink adds syrup, common salt, camphor, and alcohol.
- *1722. Wechsler, S. 312052. 1901.
Library lacks specification.
Lithographic ink.
- *1723. Plat. 316633. 1901.
Library lacks specification. See Rev. chim. indus., 1902, tome 13, p. 152; Mon. sc. B., 1903, série 4, tome 17, p. 54.
Printers' transfer ink. Printers' ink, bitumen, antiseptic, lard.
- *1723a. Wass, A. G. 322298. 1902.
J.S.C.I., 1903, v. 22, p. 307.
Varnish for letterpress or lithographic printing. Resin, petroleum, and colors.
- *1723b. Préaubert, L., and G. A. THUBÉ. 331805. 1903.
J.S.C.I., 1904, v. 23, p. 448.
Adhesive material used as thickener for printers' ink. Casein base.
- *1724. Meixell, W. B., and T. HOLT. 337980. 1903.
De-inking process using soda, margaric acid, oleic acid, and water.
1725. Morand, A. 341141. 1904.
Mon. sc. B., 1905, série 4, tome 19, p. 180.
Copying writing ink using glycerin added to ordinary ink.

Patents—France, continued.

*1726. Tariel. 344730. 1904.

Safety printing ink. Recipe not given.

1727. Williams, W. S. 353097. 1905.

Indelible fountain pen ink. Carbon, prussian blue, oil, turpentine.

1728. Coterillo y Ojeda, F., and R. J.

QUESADA. 355141. 1905.

Mon. sc. B., 1907, série 4, tome 21, p. 44; 1906, tome 20, p. 122; C. A., 1907, v. 1, p. 509, 1644.

Writing copying ink. Ink powder, sugar, glycerin, and water. Writing ink may be used instead of powder.

*1728a. Hart, J. J. 356153. 1905.

J.S.C.I., 1906, v. 25, p. 17.

Ink for polychromatic printing. Dye, solvent, fuller's earth or clay.

*1729. Fireman, P. 357912. 1905.

Rev. chim. indus., 1906, tome 17, p. 90; Mon. sc. B., 1906, série 4, tome 20, p. 127; J.S.C.I., 1906, v. 25, p. 129, 585; C. A., 1907, v. 1, p. 666.

Ferro-ferric oxide for black printers' ink.

1730. Morris, E. R., and others.

369021. 1906.

Mon. sc. B., 1908, série 4, tome 22, p. 97; J.S.C.I., 1907, v. 26, p. 58.

Copying writing ink. Perchloride of iron, campeche, indigo, carmine, methyl violet, water, and thickener. Also recipe for special paper.

*1731. Schoenach, R. 385615. 1907.

Mon. sc. B., 1909, série 4, tome 23, p. 25. Bronze printers' ink. Bronze powder, Japan varnish, amyl acetate, acetin.

1731a. Garzino, L. 389660. 1908.

Copying ink (sympathetic). See English patent 9108, 1908.

*1732. Herz, L. 397576. 1908.

J.S.C.I., 1909, v. 28, p. 811.

De-inking process.

1733. Bernard, J. I., and B. KAUFMANN.

397855. 1908.

Mon. sc. B., 1911, série 5, tome 1, p. 20; C. A., 1911, v. 5, p. 2434.

Indelible writing ink. Water, ammonia, gum lac, anilin black, alcohol.

*1734. Manche, A., and others.

397923. 1908.

J.S.C.I., 1909, v. 28, p. 895; Mon. sc. B., 1912, série 5, v. 2, p. 174.

Lithographic and autographic ink. Water, anilin violet, fuchsin, ammonia, wax, resin, olein.

*1735. Jagenburg, F. G. 399604. 1909.

Mon. sc. B., 1911, série 5, tome 1, p. 22; Chemisch-technisches Repertorium, 1909, Jahrg. 33, p. 487; J.S.C.I., 1909, v. 28, p. 992; C. A., 1911, v. 5, p. 218, 2438.

Colored printers' ink. Aqueous solution of color emulsified with oils and resins.

*1736. Hopkins, M. S., and C. R. BARNETT. 404456. 1909.

J.S.C.I., 1910, v. 29, p. 166.

De-inking process.

1736a. Henkel & Co. 409697. 1910.

Mon. sc. B., 1911, série 5, v. 1-2, p. 155.

De-inking process.

1737. Hochstetter, R. 405048. 1909.

J.S.C.I., 1910, v. 29, p. 223.

Mimeograph ink using sulphonated oil, and organic color in glycerin.

1738. Rueter, A. 410635. 1909.

J.S.C.I., 1910, v. 29, p. 831; 1911, v. 30, p. 1072; C. A., 1911, v. 5, p. 3923.

Quick-drying writing ink. Addition of alcohol to ordinary writing ink.

1739. Montet, V. C. F. 414128. 1910.

Decalcomania ink.

*1740. Child, R. C., and J. JOHNSTON.

414179. 1910.

J.S.C.I., 1910, v. 29, p. 1215.

Lithographic and printers' ink. Gets finely divided material by subjecting schist, or similar substances, to current of air.

*1741. Child, R. C. 429449. 1911.

J.S.C.I., 1911, v. 30, p. 1223.

Printers' black ink based on tar.

*1742. Winestock, O. C., and others.

432744. 1911.

J.S.C.I., 1912, v. 31, p. 123.

De-inking process.

1743. Booth, D. 440947. 1912.

Mon. sc. B., 1913, série 5, v. 3, p. 200.

Writing copying ink. Anilin, gum, sugar, glycerin, water, acetic acid.

*1744. Schimek, J. 446095. 1912.

J.S.C.I., 1913, v. 32, p. 133.

De-inking process.

*1745. Société Lefranc et Cie.

448616. 1911.

Mon. sc. B., 1914, série 5, tome 4, p. 45; J.S.C.I., 1913, v. 32, p. 421.

De-inking process.

*1745a. Lesne, H., and M. LAPIERRE.

451452. 1913.

Lange, v. 3, p. 205.

Rapid drying printing and lithographic ink. Olive oil, sandarac, stearin, soap, resin, olein, wax.

*1745b. Kurtz-Haehnle, C. 459300. 1913.

J.S.C.I., 1913, v. 32, p. 1153.

De-inking process.

*1745c. Berger, and WIRT. 458646. 1913.

C. A., 1914, v. 8, p. 3245.

Printers' colored ink. Albuminous substances, alkalis, oleosulphonic acid or its salts.

*1746. Wolff, M. 462452. 1913.

Mon. sc. B., 1914, série 5, tome 4, p. 157; J.S.C.I., 1914, v. 33, p. 267.

Printers' black using peat.

Patents — France, continued.

*1746a. **Turkin, N. W.** 467039. 1914.

J.S.C.I., 1914, v. 33, p. 838.

Manufacture of printing colors. Pigments based on turkey-red oil and an alkali.

*1747. **General Waste-paper Recovery Co.**
478288. 1915.

J.S.C.I., 1916, v. 35, p. 1009.

De-inking process.

1748. **Olsen, J. C.** 503492. 1919.

Solid ink. Dextrin, anilin, graphite, tannate of iron.

*1749. **Ruetgerswerke Akt. Ges., and H. TERCHMANN.** 535383. 1922.

Chim. et ind., 1922, v. 8, p. 1070.

Printers' black ink from tars. See French patent: 518884 of 1921.

*1750. **Eyrich, H. R., and J. A. SCHREIBER.**
535859. 1922.

Mon. sc. B., 1923, série 5, tome 13, p. 41;
Chim. et ind., 1922, v. 8, p. 878.

De-inking process.

*1751. **Fitzgerald, F. C.** 537905. 1922.

Lithographic ink. Glycerin, chloride of calcium, phosphate of potassium, carbolic acid, gum, and litho ink.

*1752. **Gauvin, S. A.** 538968. 1922.

Printers' black and colored inks. Uses extract of *Pistachier lentiscus*.

*1753. **Angier, E.** 552622. 1923.

Chim. et ind., 1923, v. 10, p. 942; Cent., 1923, Jahrg. 94, pt. 2, Tech. Teil, p. 423.

De-inking process.

1754. **Plauson's, Ltd.** 552668. 1923.

Colloidal writing ink.

*1755. **Alchemic Gold Co.** 555722. 1923.

Chemisches Centralblatt, 1923, Jahrg. 94, Teil 2, Tech. Teil, p. 772.

Printers' embossing ink.

1756. **Reitze, E., and E. TRUJILLO.**
560641. 1923.

Finger-print ink for documents. Glycerin, alcohol and color.

*1757. **Alchemic Gold Co.**
560827-28. 1923.

Metallic printers' inks.

1758. **Spensley, J. W.** 562541. 1923.

Centrifugal ink machine.

*1759. **Sauvage, F.** 562906. 1923.

Luminous printers' inks.

1760. **Indelible Coloration Co.**
564039. 1923.

Fusible ceramic ink.

1761. **Dello Ink Corporation.** 568003. 1924.

Indelible writing ink with alum base.

1762. **Goldsmith, B. B.** 570984. 1924.

Ink cartridge and recipe for ink tablet.

1763. **Établissements Édouard Belin.**
571735. 1924.

Ink for producing relief surfaces.

1764. **Kaumagraph Co.** 579568. 1924.

Marking ink. Stearic acid, indulin base.

*1765. **Bourcet, P., and H. REGNAULT.**
580624. 1924.

De-inking process.

1766. **Nater, J.** 581031. 1924.

Copying ink for fountain pens. Water, glycerin, color, wood gum arabic.

1767. **Ink-out Manufacturing Co.**
586796. 1924.

De-inking process.

• (To be continued)

INTERESTING RECENT ADDITIONS

INDUSTRIES AND INDUSTRIAL ARTS

Armsby, Henry Prentiss, and C. ROBERT MOULTON. The animal as a converter of matter and energy. New York: The Chemical Catalog Company, Inc., 1925. 236 p. 8°. \$3.00. **PPD (119)**

Discusses in detail and with many tables and footnote references the processes by which the raw materials contained in stock feeds are converted into animal substances. Treats the subject both qualitatively and quantitatively and outlines experimental methods.

Borer, Frank J. Railway pipe fitter's handbook. Pipe fitting in theory and practice for locomotive, passenger and freight cars. New York: Simmons-Boardman Publishing Co., 1925. x, 223 p. illus. 12°. \$2.50. **TPD (121)**

Covers all phases thoroughly, with chapters on shop inspection and repairs, car heating systems, estimation of radiation, brazing and soldering, specifications for installation of air brakes, and useful tables. Author is Acting General Foreman of the Freight Car Department of the Central Railroad of New Jersey.

Dennison, Charles Stuart. Around the world with Texaco. n.p.: The Texaco Company, 1925. viii, 165 p. illus. 4°. Gratis.

Brief, copiously illustrated record of a trip around the world in the interests of a well-known petroleum company. Originally published in *The Texaco star*.

***Fishenden, Margaret.** House heating, a general discussion of the relative merits of coal, coke, gas, electricity, etc., as alternative means of providing for domestic heating, cooking and hot water requirements, with special reference to economy and efficiency. London: H. F. & G. Witherby, 1925. 296 p. illus. 4°. 25s. **VEW (121)**

"Practice in English house heating, as indicated by this book, is largely a question of drawing room grates and tea urns. We find almost nothing in the volume that treats of what in this country we call house heating. Out of nearly 300 pages there is but one scant chapter of twelve pages devoted to 'The development of central heating'... Miss Fishenden has gathered together much interesting information on radiant heat emission, particularly as applied to grates and incandescent gas heaters." — *Heating and ventilating magazine*, June, 1925.

Forman, Harry W. Rights of trains. Revised edition... A complete analysis of single track standard code rules in the form of lectures, questions and answers, chapters relating to duties of certain officers and employees, recommended safe practices, and much seasonable advice. New York: Simmons-Boardman Publishing Company, 1925. 608 p. illus. 12°. \$3.00. **TPC (Stack 4)**

A veteran train dispatcher tells in plain and good English the details of time and time tables, signal rules, train movements, transmission of orders, forms

of train orders, protection of trains, conductors' duties, operators' duties, and the various duties of train masters and chief dispatchers.

***Fraprie, Frank R.** American photography exposure tables and handbook. Boston: American Photographic Publishing Co., 1925. 174 p. illus. 16°. \$1.00 **MFL**

Small pocket book containing a wealth of reliable information on exposure, developing, and printing. Exposure tables include factors for nearly three hundred plates and films.

***Godfrey, Edward.** Engineering failures and their lessons. Pittsburgh: Published by the Author, 1924. xiii, 270 p. illus. 8°. \$3.00. **VDC (121)**

Discusses failures of dams, arches, columns, concrete and reinforced concrete, flat slabs, steel work, bracing, tanks, standpipes, suspension bridges, draw bridges, chimneys, retaining walls, veneer in walls and columns, foundations, pipe lines, and handling machinery.

"To the unbiased mind, however, notwithstanding the truculent style of the book, its lack of logical presentation, and the superfluity of controversial matter, there is much of value to be found in it." — *Engineering news-record*, New York, April 23, 1925.

Also reviewed in *Canadian engineer*, April 7, 1925.

Hooper, Luther. Weaving with small appliances. Book III, The table loom. London and New York: Sir Isaac Pitman & Sons, 1925. ix, 71 p. illus. 8°. \$2.25. **VLD (121)**

This attractively illustrated work describes construction and operation of a loom "adapted not only for weaving plain fabrics for domestic use, where only a small space can be afforded for the process, but, with the addition of certain simple fittings, to furnish the student of ornamental weaving with a loom on which a very great range of designs can be worked out with the least amount of tedious alteration of the mounting and mechanism." — *Page 1*.

Houstoun, Robert Alexander. Intermediate light. London and New York: Longmans, Green and Co., 1925. x, 228 p. illus. 12°. \$1.75 **PEB (117)**

"All the experiments commonly performed by practical classes in schools are described... together with the theoretical treatment which I have found easiest and most interesting for those beginning the study of the subject." — *Preface*.

Hull, H. B. Household refrigeration. A complete treatise on the principles, types, construction and operation of both ice and mechanically cooled domestic refrigerators, and the use of ice and refrigeration in the home. Chicago: Nickerson and Collins Co., 1924. 328 p. illus. 8°. \$3.50. **VOI (119)**

Unique and complete, treating of refrigeration units and theory; history; chemical and physical properties of refrigerants; heat transfer; types and constructions of household ice boxes and machines; testing of ice boxes; foods and their preservation; with various tables.

Reviewed in *Electrical world*, May 9, 1925.

Industries and Industrial Arts, continued.

Leathem, J. G. Elements of the mathematical theory of limits. London: G. Bell & Sons, Ltd., 1925. viii, 288 p. 8°. 14s.

VOIN (117)

"If [the student] is acquainted with algebra up to the binomial theorem for an integral exponent, the meaning of logarithms, the elements of trigonometry, and a certain amount of geometry, he need not be deterred from entering upon the study of limits... It is therefore my hope that the book will be of use to those at school no less than to junior university students." — *Preface*.

***Lewis, William Cudmore McCullagh.** A system of physical chemistry. In three volumes. vol. 2, Thermodynamics. New York: Longmans, Green & Co., 1925. viii, 489 p. 4. ed. diags. 8°. \$4.75.

PLD (119)

"Opportunity has been taken of making further corrections and emendations and likewise of introducing here and there short accounts of the more recent investigations of the applications of thermodynamics to chemistry. Amongst others, a brief account has been inserted of the rôle of the thermodynamic concept of 'activity', especially in relation to solutions." — *Preface*.

Author is Professor of Physical Chemistry in the University of Liverpool.

Reviewed in *Engineering*, Aug. 14, 1925.

Lockett, Arthur. Camera lenses, a useful handbook for amateur and professional photographers. London and New York: Sir Isaac Pitman & Sons, 1925. xi, 111 p. illus. 12°. 75c.

MFI (Stack 4)

"The meaning of technical terms is fully explained, the veil is drawn from many of those ambiguities that are apt to puzzle the average worker, and no pains have been spared to simplify the arithmetic and formulae relating to lenses, so valuable in practical work yet so frequently ignored." — *Preface*.

Reviewed in *Amateur mechanic*, March 7, 1925.

***Naoúm, Phokion.** Nitroglycerin und Nitroglycerinsprengstoffe (Dynamite) mit besonderer Berücksichtigung der dem Nitroglycerin verwandten und homologen Saltpetersäureester. Berlin: Julius Springer, 1924. xi, 416 p. illus. 8°. \$4.50.

VOG (119)

"It contains considerable information not covered by older literature on the subject, and being a description of modern German manufacturing methods it offers the American reader an authoritative source of comparison of his methods and products with those of Germany... Numerous compounds related to glycerin and their nitration products used in the explosives industry are described with more detail than has appeared in older literature... Steps have been taken by the author of this review to secure the right of translating Dr. Naoúm's book into English." — *Clark S. Robinson in Chemical and metallurgical engineering*, July, 1925.

National Automobile Chamber of Commerce. Facts and figures of the automobile industry, 1925 edition. New York: National Automobile Chamber of Commerce, 1925. 96 p. illus. 8°. Gratis.

Desk — Tech. Div.

A wealth of statistics and diagrams covering production, registration, railroad traffic, uses of motor cars, farm ownership, taxation, highways, legislative principles; truck, bus and taxi statistics; service, safety, financing; relationship of rail, water, electric and motor transportation.

Norman, Carl Adolph. Principles of machine design. New York: The Macmillan Company, 1925. viii, 710 p. illus. 8°. \$6.50.

VFE (121)

Fairly elementary treatment of materials and strength determinations, with simple mathematics. 584 illustrations, numerous problems, and frequent references to the products of well-known manufacturers. Author is Professor of Machine Design in Ohio State University.

Reviewed in *Power*, Aug. 28, 1925.

***Phelps, Robert William, and F. W. LAKE.** Petroleum engineering. Houston, Texas: Gulf Publishing Co., 1924. xi, 574 p. illus. 8°. \$5.00.

VHY (117)

"To present in clear terms, the relation between the basic theories and laws of geology and those of petroleum geology, and their application in the occurrence and extraction of petroleum from its natural reservoirs, through to the economic phase of the industry; together with many tables and alignment charts which are applicable to petroleum engineering." — *Preface*.

Reviewed in *National petroleum news*, June 10, 1925; *Oil age*, Dec., 1924.

Raynor, George Washington. Carpenter work, stair work, mill work for the beginner. Philadelphia: The author, 1924. 66 p., 86 blue-prints. 8°. \$1.75.

VEN (121)

Nearly 100 blue-print details with explanatory texts. Author is instructor in the Central High School, Philadelphia.

Sim, James. Steam condensing plant in theory and practice. London: Blackie and Son, Ltd., 1925. xiii, 271 p. illus. 4°. 18s. 6d.

VFK (121)

"Mr. Sim, who is a practical condenser designer, gives much food for thought... There are twelve chapters, including those dealing with evaporators, surface feed-water heaters, feed systems and de-aeration plants, which have been included because their functions are so closely linked with those of the condenser proper. Surface condensers are discussed in considerable detail and with thoroughness, and there are also chapters on low- and high-level jet condensers, ejector condensers, and evaporative condensers." — *Shipbuilding and shipping record*, May 21, 1925.

Smith, D. H. An economic geography of Europe. London and New York: Longmans, Green & Co., 1925. xii, 247 p. illus. 12°. \$1.50.

(229)

"To lay before the reader a detailed study of the geography of Europe, and to analyze in some cases the geographical momentum which is responsible for the distribution of industries and people. A short survey of the broad features of geology, physiography, and climatology of Europe will be made in the early chapters, followed by an analysis of the wealth of each country. Finally a brief summary of the resources of some of the more important products will be attempted in order to bring out the relationship between the wealth of Europe and the rest of the world." — *Introduction*.

Wollison, L. Practical armature winding, a book for all interested in the design, construction or repair of D.C. armatures. London and New York: Sir Isaac Pitman & Sons, Ltd., 1925. xii, 228 p. illus. 12°. \$2.25.

VGI (121)

"Essentially from the winder's point of view, and to reduce the winding formulae to simple yet reliable terms easily understood by the practical worker who has nothing greater than ordinary school arithmetic to call upon." — *Foreword*.

HEBRAICA, JUDAICA, ETC.

Amicis, Edmondo de.

הלב. מאת אדמונדו ד'אמיציס... תרגם
מ. מבש"ן. ורשה: הוצאת אברהם יוסף
שטיבל, תרפ"ג.
Warsaw: Stybel Pub. Co. [1922.] 327
p. 8°. *PSN

Anacreon.

שירי אנקריאון. תרגם מיונית שאול
משרניחובסקי. ורשה: הוצאת אברהם
יוסף שטיבל, תר"ף.
Warsaw: Stybel Pub. Co. [1920.] 96 p.
8°. *PSN

Bedarshi, Jedaiah b. Abraham.

...בחינת עולם. מאת... ידעיה הכי
דרשי הפניני ז"ל. עם באור המלות
והענין... מאת... דוד אטמטענואסער
ז"ל, ומצורף אליו בקשת הממין עם
פירוש חדש... יצא לאור, עם תולדות
המחבר... מאת יוסף ווייסע... ומנקד
עפ"י דרבי הלשון, ועם הערות בשם:
כור הבחינה. מאת המסדר ספרי הכמי
ישראל. ווארשא: בדפוס יואל לעבענ-
זאהן.

Warszawie: Drukarni J. Lebensona
[1863.] 18 p., 1 l., 37 f., 6 l. 24°.

(ספרי חכמת ישראל. חלק א')
*PMW

Chayyim Shabbethai.

...שאלות ותשובות השייכות לטור אבן
העזר מהרב... חיים שבת... ובראשם
קונטרים מחבר מאסף כל דיני עיגונא
דאיתתא... שאלוניקי: נדפס ע"י אברהם
הגר, התי"א.
[Salonica: A. Hagar, 1651.] 222 f. f°.
*PIZ

Cooper, James Fenimore.

...גשושי. תרגם נ. טולצ'נסקי. פרנק-
פורט ע"נ מין: הוצאת "אמנות".
Frankfurt on M.: Verlag "Omonuth"
[192-?] 333 p. illus. 8°. *PSN

Dickens, Charles.

כתבים מעזבון בית הועד חפיקוקי
מאת צ'רלס דיקנס. תרגם מאנגלית. י.

ח. מביוב. ורשה: הוצאת אברהם יוסף
שטיבל, תרפ"ב.

Warsaw: Stybel Pub. Co. [1921.] 2 v.
8°. *PSN

Druck, David.

...צו דער געשיכטע פון דער יודישער
פרעסע. (אין רוסלאנד און פוילען).
ווארשא.

Warsaw: Druk "Hacefira", 1920.
147 p. 8°. *PAY

Emerson, Ralph Waldo.

...מסות ומחקרים. תרגם מאנגלית י.
ל. ברוך... ורשה: הוצאת אברהם יוסף
שטיבל, תרפ"ב.

Warsaw: Stybel Pub. Co. [1922.] 347
p. port. 8°. *PSN

Felner, Joseph.

...אמר"י ט"ל. מאמרים נכונים וביאור
רים ישרים... לפרש מקראי קודש ומאמרי
הז"ל בש"ס ומדרשים וזוהר הקדוש ותיקוני
זוהר וספר אלי' רבא וזוטא וספרי ראשונים
ואיזה חידושי גפ"ת... נתחברו... ע"י...
יוסף פעלנער... פיעטרוקוב: בדפוס מר-
דכי צעדערבוים, [תרע"ג].

Pietrokov: M. Zederbaum, 1913. 210
p. 4°. *PQX

France, Anatole.

טאים פון פראנצויזיש י. דאברושיין.
דריטע אויפלאגע. ווארשע: פארלאג "קול-
טור-ליגע".

Warsaw: Verlag "Kultur-Lige,"
1923.] 185 p. 8°. *PTW

Gabirol, Solomon ibn.

...מבחר הפנינים... לפי כתב יד הנ-
מצא בבית המדרש דק"ק לונדן... עם באור
קצר ושנויי הנוסח' ע"י... צבי פיליפאור
סקי... יצא בתוספת באור והוגה... ע"י
המסדר ספרי חכמת ישראל. ווארשא,
תרכ"ד.

Warszawie: Drukarni J. Lebensona,
1863. 34 p. 24°.

(ספרי חכמת ישראל. חלק א')
*PMW

Ganzfried, Solomon.

...שלהן ערוך קטן... לפי פסקיו של
ספר קיצור שלחן ערוך להגאון רבי שלמה

Hebraica, Judaica, Etc., continued.

גאנצפריד... גסטדר ונכתב ביד מנחם
בן רבי אליעזר גאטמליעב... האנאפער,
תרנ"ר-תרנ"ח.

Hannover: M. Gottlieb, 1896-98. 2 v.
in 1. 8°. *PIH

[Good, Edward.]

... לעבענסליעדער. לאנדאן: י. נארע.
דיצקי דרוק.
[London: J. Naroditzki, 1924. 68 p.
illus. 8°. *PTN

Heine, Heinrich.

צלילים משירי הינריך הינה המתרגמים
על-ידי ש. בן ציון. קבץ ערוך ומסודר לבני
הנעורים על ידי המתרגם ומצויר על ידי
נ. גוטמן. ברלין: הוצאת "מוריה"
דביר, תרפ"ג.

Berlin: Morijah-Dwir [1923]. 166 p.
illus. 8°. *PSN

Idelsohn, Abraham Zebi.

ספר השירים. קבץ שירים עברים לגני
ילדים, לבתי-ספר עממיים ותיכונים.
חבר אברהם צבי אידלזון... ברלין: חברת
העזרה ליהודי גרמניה, תרע"ב.

Berlin: Hilfsverein der Deutschen
Juden [1912]. xii, 112 p. 8°.

(מפרי-למוד של חברת העזרה ליהודי גר-
מניה. ב.)

*MP (Jewish)

Hebrew words with music for 1 to 4
voices.

Idelsohn, Abraham Zebi.

ספר השירים. קבץ חדש לגני ילדים
ולבתי-ספר עממיים ותיכונים, לבית ולמ-
קהל. חברו אברהם צבי אידלזון. ברלין:
הוצאת יודישר פרלאג, תרפ"ב.

[Berlin: Jüdischer Verlag, 1922. x,
168 p. 8°. *MP (Jewish)

Hebrew words with music for 1 to 4
voices.

Levita, Elijah.

פרקי אליהו בכללים קצרים באותיות
ובנקודות ובשאר דברים

Capitvla Cantici, Specierium, proprietatum, &
officiorum, in quibus scilicet agitur de
literiis, punctis, & quibusdam accenti-

bus Hebraicis... Autore Elia Levita
aeditum, & per Sebastiannm Mvn-
stervm iam pridem Latine iuxta He-
braismum uersum. Basileae: Apvd
Io. Frobenivm, 1527. 98 l. 8°. **P

London, Jack.

... זאב הים. תרגם מאנגלית ש. הלקין.
ורשה: הוצאת אברהם יוסף שטיבל.
תרפ"ד.

Warsaw: Stybel Pub. Co., 1924. 302
p. 8°. *PSN

London, Jack.

... קול מיער. תרגם מ. בן אליעזר.
פרנקפורט ע"נ מין: הוצאת "אמנות."
(ספריה "לכל". ספר זח.)

Frankfurt on M.: Verlag "Omonuth"
[192-?]. 128 p. 16°.

*PSN

Longfellow; Henry Wadsworth.

... שירת היאותה. תרגם מאנגלית
שאול משרניחובסקי. אודיסה: הוצאת
"מוריה", תרע"ג.

Odessa: Moriyah, 1913. 122 p. illus.
8°. *PSN

Maimonides, Moses.

שמנה פרקים להרמב"ם. עם באור חדש
ומספיק ותולדת המעתיק ר"ש תבון מאת
המסדר.

[Warsaw: J. Levenson, 1863.] 18 f.
24°.

(ספרי חכמת ישראל. חלק א.)

*PMW

Mishnah-Abot.

... חלק יעקב על פרקי אבות ובסוף
הספר קונטרס אל תחטאו בילד המדבר
בענין חינוך הילדים, וקונטרס שונה הלכות
אשר חנני... יעקב בלא"א מו"ה נפתלי ז"ל
גריןוואלד... סעאיני: בדפוס יעקב ווי-
דער, תרפ"ג.

[Seini: Druck von Jakob Wieder,
1923.] 69 p. 4°. *PMF

Mishnah-Abot.

מסכת אבות עם פרוש מוסר ישראל.
מחקר במוסר אבותינו ומדרש בדברי
רבנותינו. אשר חנני... ישראל בנימך

Hebraica, Judaica, Etc., continued.

בענדט... פיוולואהן רב בייסאגאלא. קוב-
נה: דפוס „עקספרעס“ תרפ”ג.
[Kovno, 1923.] 150 p. 8°. *PMF

Saadia, Gaon.

...האמונות והדעות. חברו בלשון
ערב הגאון... סעדיה הפיתומי... והעתיקו
לשפת קדשנו ר' יהודה אבן תבון... יצא
לאור עם הוספות... פעל ועשה דוד סלוצקי.
לייפציג, תרכ”ד.

[Leipzig: Druck von C. W. Vollrath,
1864.] xvi, 161 p. 16°.

(ספרי הכמת ישראל. חלק ב’.)

*PPI

Salczer, Menachem.

...דברי דוד עה”ת... מאמרים... חקרם
...דוד הכהן זאלצער... הובא לביה”ד
בחדשות ובהוצאות בנו... מנחם הכהן
שליט”א... סוואליווע: דפוס חיים יהודא
גאלדענבערג, תר”ע.

Szolyva: L. Goldenberg [1910.] 163 p.
4°.

*PLH

Schachnowitz, Salomon.

...בממלכת כוזר היהודית. רומן חס-
טורי. תרגם ש. ל. צימרון. פרנקפורט ע”נ
מין: הוצאת „אמנות“.

Frankfurt on M.: Verlag „Omonuth”
[192-?] 330 p. 8°. *PST

Schapiro, Constantin Abba.

...שירים נבחרים. עם תמונתו ומאמר
ע”ד תולדותיו וערכו הספרותי מאת יעקב
פיכמאן. ורשה: הוצאת „תושיה” תרע”א.
[Warsaw: Tuschiyah, 1911.] 132 p.
1 port. 8°.

(„ביבליותיקה גדולה” שנה ב’ סא”סב.)

*PSF

Shakespeare, William.

...קוריוזנוס. מרגדיה בחמשה אקטים.
תרגם מאנגלית לעברית דוד פרישמאן.
ורשה: הוצאת אברהם יוסף שטיבל, תרפ”ד.
Warsaw: Stybel Pub. Co. [1924.] 271
p. 8°. *PSN

Sifra.

ספרא דבי רב. כולל מדרשי התנאים
לספר ויקרא. מתוקן על פי כתבי ידו

ומבואר על ידי הרב ר’ מאיר איש שלום...
וכראש הספר מאמר כולל תולדות חייו
ורשימת ספריו ומאמריו אשר הדפוס במשך
ימיו. ברעסלויא, תרע”ה.

[Breslau: M. and H. Marcus, 1915.]
144, xv p. illus. 8°. *PLD

Tolstoi, Lev Nikolayevich.

...כתבי ל. נ. טולסטוי. עם תמונתו
ומאמרים על תולדותיו וערכו בספרות.
כרך א... ווילנא: הוצאת „מזרח ומערב”.
Wilna: Verlag “Mizrach u-Maarrow”
[19-?] illus. 8°. *PSN

Trumpeldor, Joseph.

מחיי יוסף טרומפלדור. קובץ מכתבים
וקטעי רשימות. יפו: הוצאת הסתדרות
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[Jaffa, 1922.] xiii, 232 p., 1 port. 4°.
*PWZ

Weil, Jacob.

...תקוני זבח. חיברו מהר”מ בראנש-
ווייג... על דיני שחיטות. הפנים הוא
המהרי”ו, ופירוש הקצר קרא בשם תיקון
הזבח, ופירוש הארוך קרא בשם זבחי צדק.
ועוד בו שלישי לחלוק על מה שכתב ס’
הר”ץ בדינים אלו קרא בשם זבחי ריב. ועל
דיני בדיקות הריאה. הפנים הוא המהרי”ה,
פירוש הקצר קרא בשם תיקון חבדק, ול-
פירוש הארוך קרא בשם מחזיק חבדק.
ועוד בו שלישי לחלוק על מה שכתב
הר”ץ בדינים אלו קרא בשם כדק הבית...
ועתה הכאתי שנית לבית הדפוס עם הוספה
מרוכה... ואגב הכאתי לבית הדפוס שנית
ספרי שו”ת דעת חכמים ודעת הזבח... ג”כ
בדיני שו”ב... מיכאל שו”ב בק”ק דאמסק
... ווארשא: בהוצאת נפתלי ציילינגאלד,
תרמ”ה.

[Warsaw: J. Halter, 1888.] 116 p. 4°.
*PIM

Yellin, Joshua.

זכרונות לבן-ירושלים, תקצ”ד-תרע”ה,
מאת יהושע ב”ר דוד יעלין. ירושלים
תרפ”ד.

[Jerusalem, 1924.] iii, 202 p., 1 port.
8°. *PWC

Hebraica, Judaica, Etc., continued.

Zulawski, Jerzy.

... שבתי צבי. דרמה בארבי מערכות.

תרגם משה בלישטיפט. ורשה: הוצאת אברהם יוסף שטיבל, תרפ"ד.

Warsaw: Stybel Pub. Co. [1924.] 142 p. 8°. *PSN

Zweifel, Eliezer Zebi.

שלום על ישראל או שם משם טוב. והוא ציור כללי ומושג הקפי מענין הבעש"ט ותלמידיו... מאת אליעזר צבי הכהן צוויי-פעל. זיטאמיר, תרכ"ח-תרל"ג.

Zhitomir, 1868-73. 4 v. in 1. 8°. *PQV

Part III² printed in Wilna.

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Akademiya Nauk, St. Petersburg. Материалы для истории Императорской Академии Наукъ. Томъ 1-10 (1716-1750). С.-Петербургъ, 1885-1900. 4°. *QCB

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Aleksandrenko, Vasilii Nikiforovich. Русскіе дипломатическіе агенты въ Лондонѣ въ XVIII в. Варшава: Тип. Варшавскаго учебнаго округа, 1897. 2 v. in 1. 4°. *QG

Bednyi, Dem'yan., pseud. of Yefim Alekseyevich Pridvorov. Собрание сочинений в одном томе. 1909-1923. Со статьей К. С. Еремеева. Москва: "Рабочая газета," 1924. 287 p. illus. 2. ed. 4°. *QDH

Bogdanowicz, Karol. Желѣзные руды Россіи. Геологическій характеръ ихъ мѣсторожденій, распространеніе и запасы. К. И. Богдановича

... С.-Петербургъ: Тип. М. М. Стасюлевича, 1911. xi, 327 p. 4°.

*QFP

Botkin, Mikhail Petrovich. Собрание М. П. Боткина. С.-Петербург: Т-во Р. Голике и А. Вильборгъ, 1911. 38 p., 2 l. illus. f°.

†*QDZ

Bukharin, Nikolai Ivanovich. Теория исторического материализма. Популярный учебник марксистской социологии. Москва: Государственное издат., 1923. 322 p. 8°. *QI

Chulkov, Mikhail Dmitriyevich. Абевера рускихъ суевѣрій, идолопоклонническихъ жертвоприношеній, свадебныхъ простонародныхъ обрядовъ, колдовства, шеманства и Проч. Сочиненная М. Ч... Москва: Тип. Ф. Гиппиуса, 1786. 326 p. 8°. *QCT

Chulkov, Mikhail Dmitriyevich. Словарь рускихъ суевѣрій. Санктпетербургъ: Печатано въ вольной типографіи у Шнора, 1782. 4 l., 271 p. 8°. *QCT

Georgi, Johann Gottlieb. Описание всѣхъ обитающихъ въ Россійскомъ государствѣ народовъ, ихъ житейскихъ обрядовъ, обыкновений, одеждъ, жилищъ, упражненій, забавъ, вѣроисповѣданій и другихъ достопамятностей. Твореніе, за нѣсколько лѣтъ передъ симъ на нѣмецкомъ языкѣ, Іоанна Готтлиба Георги, въ переводѣ на русскій языкъ весьма во многомъ исправленное и въ новѣ сочиненное; въ четырехъ частяхъ со 100 гравированными изображеніями народовъ и 8 виньетами. Издѣвѣніемъ книгопродавца Ивана Глазунова. Съ позволенія с. петербургской цензуры. Въ Санктпетербургѣ: при И. Академіи наукъ, 1799. 4 v. in 1. illus. 4°. *QFP

Slavica, continued.

Itogi... Итоги борьбы с голодом в 1921–22 г. г. Сборник статей и отчетов. Москва: Изд. Ц. К. Помгол, 1922. iv, 499 p. illus., tables. 4°.

* QGF

Kulisher, Iosif Mikhailovich. Очерк истории русской торговли. Петербург: "Атеней," 1923. 317, iv p. 8°.

* QIP

Maack, Richard Karlovich. Путешествие на Амуръ, совершенное по распоряженію Сибирскаго отдѣла Императорскаго русскаго географическаго общества, въ 1855 году, Р. Маакомъ. Одинъ томъ, съ портретомъ графа Муравьева-Амурскаго и съ отдѣльнымъ собраніемъ рисунковъ, картъ и плановъ. Изданіе члена-соревнователя Сибирскаго отдѣла С. Ф. Соловьева. Санктпетербургъ: Тип. К. Вульфа, 1859. viii p., 2 l., 320 p., 3 l., [3–]211, viii p., 1 l., xix p., 1 port. f°.

* QFP

— — Альбомъ. [С.-П.: Изд. С. Ф. Соловьева, 1859?] map, plans, plates. 4°.

Müller, Gerhard Friedrich. Описаніе Сибирскаго царства и всѣхъ происшедшихъ въ немъ дѣлъ, отъ начала, а особливо отъ покоренія его россійской державѣ по сіе времени; сочинено Герардомъ Фридрикомъ Миллеромъ... Книга первая. Въ Санктпетербургѣ; при И. Академіи наукъ, 1750. 8 p.l., 457 p., 17 l. 4°.

* QGK

Nemirovich-Danchenko, Vladimir Ivanovich. Горе от ума в постановке Московскаго художественнаго театра. Москва: Государственное издат., 1923. 265 p. illus. f°.

† * QDZ

Oktyabr'skaya... Октябрьская революция. Первое пятилетіе. Харьковъ: Гос. издат., 1922. 663 p. illus. 8°.

* QGF

Peter I., the Great, emperor of Russia. Письма и бумаги императора Петра Великаго. т. 1–7¹. С.-Петербургъ: Государственная тип., 1887–1918. illus. 4°.

* QGO

Rozhdestvenski, Sergyei Vasil'yevich. Историческій обзоръ дѣятельности министерства народнаго просвѣщенія. 1802–1902. Составилъ С. В. Рождественскій. Изданіе Министерства народнаго просвѣщенія. С.-Петербургъ: Государственная тип., 1902. ii, 785 p. illus. 4°.

* QI

Russia. — Arkheograficheskaya Kommissiya. Памятники сибирской исторіи XVIII вѣка... Петербургъ: Тип. Министерства внутреннихъ дѣлъ, 18882–85. 2 v. 4°.

* QGO

Russia. — Arkheograficheskaya Kommissiya. Русская историческая библіотека, издаваемая Государственною археографическою коммисією Россійской академіи наукъ. Т. 1–3, 6–7, 14–37. Петроградъ: тип. Перв. Петроград. Труд. Артели Печатн. [etc.], 1872–1923. 4°.

* QGO

Russia. — Glavnoye Upravleniye Zemleustroistva i Zemledeliya: Peregulncheskoye Upravleniye. Азиатская Россія... Изданіе Переселенческаго управленія Главнаго управленія землеустройства и земледѣлія. С.-Петербургъ: [Т-во "А. Ф. Марксъ,"] 1914. 3 v. illus. obl. f°.

* QFP

Russia. — Ministerstvo Finansov. Описаніе Маньчжуріи (съ картой). Составлено въ Канцеляріи министра финансовъ подъ редакціей Димитрія Позднѣева... С.-Петербургъ: Тип. Ю. Н. Эрлихъ, 1897. 2 v. in 1. 4°.

* QF

Slavica, continued.

Russki muzei, St. Petersburg. Русскій музей императора Александра III. Живопись и скульптура. Составилъ баронъ Н. Врангель. С. П. Б.: Издание Русскаго музея императора Александра III., 1904. 2 v. in 1. illus. f°. * QDZ

Skrebitzki, Aleksandr Il'ich. Крестьянское дѣло въ царствованіе императора Александра II. Матеріалы для исторіи освобожденія крестьянъ. По офіціальнымъ источникамъ составилъ Александръ Скребицкій... Боннъ на Рейнѣ: Печатано въ тип. Ж. Крюгера, 1862-68. 4 v. in 5. 8°. * QGO

Smirnov, Vasilii Dmitriyevich. Крымское ханство подъ верховенствомъ Оттоманской Порты до начала XVIII вѣка. С.-Петербургъ, 1887. xxxv, 772 p. 4°. * QGS

Storozhenko, Nikolai Il'ich. Предшественники Шекспира. Эпизодъ изъ исторіи англійской драмы въ эпоху Елисаветы. Сочиненіе Николая Стороженка. Т. 1. С.-Петербургъ: тип. В. Демакова, 1872. 8°. * QDK

No more published.

Tatishchev, Sergyei Spiridonovich. Императоръ Николай и иностранные дворы. Историческіе очерки С. С. Татищева... С.-Петербургъ: Тип. И. Н. Скороходова, 1889. xxv, 459 p. 4°. * QG

Tolstoi, Fiodor Petrovich. Медальоны въ память военныхъ событій 1812, 1813, 1814 и 1815 годовъ, изобрѣтенные графомъ Ѳ. Толстымъ, и выгравированные на стали, по способу Бета, Н. Менцовымъ... Изданы Археографическою комиссіею. Санктпетербургъ: Печатано въ военной типографіи, 1838. 24 l., 21 pl. f°. ††* QDZ

Tzybikov, Gonbochzhab Tzebekovich. Буддистъ паломникъ у святынь Тибета. По дневникамъ, веденнымъ въ 1899-1902 гг. Изданіе Русскаго географическаго общества. Петроградъ: 15-ая государственная тип., 1918. x, 471 p. illus. 4°. * QF

Yevreinov, Nikolai Nikolayevich. Исторія тѣлесныхъ наказаній въ Россіи. Дополненное статьими запреценными старымъ правительствомъ. п. р. [1923?] 234 p. illus. f°. * QIX

CIRCULATION STATISTICS FOR THE MONTH OF AUGUST

BRANCHES	CIRCULATION		NEW REGISTRA- TIONS	VOLUMES ACCES- SIONED
	HOME USE (VOLUMES)	READERS OF REFERENCE BOOKS		
MANHATTAN				
Central Building	48,493	---	1,055	399
Children's Room	2,326	2,255	37	116
Extension Division	22,309	---	266	231
Library for the Blind	3,032	---	9	19
East Broadway, 33	6,811	248	54	49
East Broadway, 192	21,739	1,172	208	115
Rivington street, 61	13,917	---	135	130
East Houston street, 388	14,134	1,499	31	254
Leroy street, 66	7,401	289	56	143
8th street, 135 Second avenue	10,551	273	72	108
10th street, 331 East	17,032	1,443	162	175
13th street, 251 West	8,971	1,160	73	35
23rd street, 228 East	7,392	591	74	46
23rd street, 209 West	7,159	790	99	54
36th street, 303 East	5,720	488	41	39
40th street, 457 West	6,079	99	49	35
50th street, 113 East	4,552	209	57	30
51st street, 742 Tenth avenue	7,772	305	61	302
58th street, 121 East	10,091	552	151	423
67th street, 328 East	10,276	592	93	113
69th street, 190 Amsterdam avenue	8,027	309	78	69
77th street, 1465 Avenue A	10,757	81	50	228
79th street, 222 East	12,339	314	133	146
81st street, 444 Amsterdam avenue	10,869	563	124	188
96th street, 112 East	21,466	198	154	150
100th street, 206 West	13,890	456	163	75
110th street, 174 East	17,328	1,458	157	303
115th street, 203 West	13,142	127	105	114
124th street, 9 West	8,792	929	161	71
125th street, 224 East	7,711	519	74	74
125th street, 518 West	13,697	509	123	134
135th street, 103 West	7,276	809	140	53
145th street, 503 West	14,295	920	157	217
St. Nicholas avenue, 1000	12,515	307	147	80
179th street, 535 West	16,859	534	207	106
THE BRONX				
140th street, 321 East	13,029	53	155	113
Morris avenue, 910	12,581	648	161	147
160th street, 761 East	24,292	1,960	364	97
168th street, 78 West	5,563	351	99	35
169th street, 610 East	24,824	596	507	175
176th street and Washington avenue	27,057	2,202	360	315
Bainbridge avenue, 2556	22,230	754	346	96
Kingsbridge avenue, 3041	3,312	141	32	28
RICHMOND				
St. George	6,262	934	65	93
Port Richmond	9,173	180	106	56
Stapleton	6,604	75	56	48
Tottenville	3,472	7	20	50
Totals	583,119	27,899	7,027	6,077

* In addition 1,450 books were read at agencies of the Extension Division.

PRINCIPAL DONORS IN AUGUST, 1925

	VOLS.	PMS.		VOLS.	PMS.
American Federation of Labor (60 portfolios, 28 scrap-books, 9 albums)	8	18	Keefe, Thomas	1	
Balthaser, F. W.	1		Kennan, Mrs. George (22 periodicals)	15	8
Barney, Miss Dorothy	73	6	Kern, Dr. John Hewins	2	
Belgium. Ministère de l'Industrie, du Travail et du Ravitaillement	1	1	Kraus, Adolf	1	
Bentley, Miss Maud A.	1		Laimbeer, Richard Harper	1	
Berliner Bibliophilen-Abend		1	La Motte, Ellen N.		3
Bigelow, Miss Grace (12 periodicals, 2 maps, cards and letters)	117	284	Lawrence, John S.		1
Brazil. Imprensa Nacional	21	28	Levitas, Arnold		23
Butler, Joseph G., Jr.	1		Lund, Bibliothèque de l'Université Royale	21	
Castle, Charles Sumner	1		Mäsarykova Akademie Práce	3	15
Catalonian Cultural Committee	1		Metropolitan Museum of Art	1	
Chile. Oficina Central de Estadística	2	4	Moniz, Dr. Gonçalo	1	
Cromie, R. J.	1		Mosher, O. W. Jr.	1	
Crummer, Dr. LeRoy (1 drawing)			Muenchhausen, Charlotte Freifrau von	1	
Cushing, Harry Cook, Jr.	1		Musées Royaux du Cinquantenaire	1	
Czechoslovakia. Office de Statistique	5		National Book and Bible House	1	
de Aquino, Radler		3	Nearing, Prof. Scott	1	
Deinard, E.	1		New York State Chamber of Commerce		9
de Mille, Mrs. Anna George (10 engravings, 56 photographs, clippings, manuscripts)	94	256	Nicaragua. Ministerio de Instrucción Publica	2	
Du Sauld, Gabrielle (programs, letters, photographs, prints, 1 badge, 3 autographs)		2	Nordiska Museet	4	3
Deutscher Nahrungs- und Genussmittel Arbeiter	4		Norlie, Dr. Olaf Morgan	1	
Edmonds, Rev. W. Everard	1		Onondaga Historical Association	1	
Eltonhead, Mrs. Edward J.	1		Pearsall, A. W.		1
Elzas, Rev. Dr. Barnett A.	1		Pearson, E. J.	1	
Fairchild, Mrs. Charles S. (1 letter)	3		"Plamja"	3	1
Federation of British Industries	2	4	Potter, Miss Agnes (colored lithograph)		
Fink, Z. S.		1	Prague. Bureau communal de statistique	2	
Finney, T. M.		1	Rand School of Social Science (1,144 periodicals)	1,198	805
Gage, Rev. W. M.		1	Reigner, Charles G.	1	
Genève. Switzerland. Bibliotheque	7		Riedner, Dr. Wm. (typed manuscript)		
Guzmán, Señor don Rafael Vilella		19	Roosevelt, Franklin D.	1	
Hadassah Medical Organization		12	Sanguily y Arizti, Manuel	1	
Harding, W. J.	1		Società Umanitaria	2	4
Hart, George O. (3 prints)			Southern Rhodesia. Geological Survey		21
Haute Commission Interalliée des Territoires Rhénans	1		Spalato. Arheoloski Muzej	5	
Hinckley, Alice C.		8	Standard Book Company	1	
Hosford, H. Lindley (3 prints)			Statham, Rev. S. P. H.	1	
Imber, Samuel Jacob	1		Sveriges Industriforbund	3	
India. Lahore. Board of Economic Inquiry	1	4	Switzerland. Armée Federale	20	
Indo-Chine. Gouverneur Général	1	1	Tytus, Mrs. Edward J.	1	
Institut Archeologique Bulgare	1		Union League Club of New York	330	11
Instituto de Investigaciones historicas	1		Valentine, Miss Carolyn Syron (typed manuscript)		
International School of Designing	1		Van Benthuyssen, Alvin Seaward	50	8
			Wigan Public Libraries	1	
			Woods, Col. Arthur	1	

PUBLICATIONS OF THE NEW YORK PUBLIC LIBRARY

(Now in Print)

HISTORY AND GUIDES

	PRICE
History of The New York Public Library, by H. M. Lydenberg. 1923	\$2.00
Handbook of The New York Public Library	.25
Facts for the Public	.05
Central Building Guide	.05
Questions About Your Library (General Information about the Library)	Free
For Sightseers. Central Building	Free

PERIODICALS

Annual Report of The New York Public Library. (A limited number are given free upon request.)

Bulletin of The New York Public Library. Published monthly. Chiefly devoted to the Reference Department. Bibliography, news of the Library, reprints of manuscripts, descriptions of new accessions. \$1.00 a year; current single numbers for 10 cents. Back numbers at advanced rates.

Branch Library Book News. A selected list of new additions to the Circulation Department, with other lists and articles. Published monthly, except in July and August. For sale at the Branches and at the Inquiry Desk. 2 cents a copy; 25 cents a year, postpaid.

New Technical Books. A selected list of books on industrial arts and engineering, recently added to the Library. Published quarterly. 25 cents a year, postpaid.

Municipal Reference Library Notes. Published weekly except during July and August, for circulation among the officials and employees of the City of New York. Price: \$2.00 a year; 5 cents a copy. Apply at Room 512, Municipal Building.

LIST OF BOOKS IN THE LIBRARY RELATING TO VARIOUS TOPICS, TEXTS PRINTED FROM MANUSCRIPTS OWNED BY THE LIBRARY, ETC.

REFERENCE DEPARTMENT

	PRICE		PRICE
Almanacs, A list of New York, 1694-1850. 1921	1.00	Avery Collection, Handbook of — Supplement: Additions of Prints, 1901-1920. 1921	.15
American Interoceanic Canals. A list of references. 1916	.30	Avesta and Romani, by Albert Thomas Sinclair. 1916	.05
American-Romani Vocabulary, by Albert Thomas Sinclair. 1915.	.05	Beadle Collection of Dime Novels. 1922	.50
Armenia and the Armenians. A list of references. 1919	.30	Beaumarchais, Editions of, in New York City. 1925	.15
Article of Faith, An, by Hiller C. Wellman. 1919	.05	Berlin and the Prussian Court in 1798. From a ms. journal of Thomas Boylston Adams. 1916	.15
Assyria and Babylonia. A list of references. 1918	.45	Billings, Dr. John Shaw, Memorial Meeting in honor of the late. 1913	.10
Astor Library, Catalogue of the. 8 volumes. Sewed. Per volume	5.00	British Genealogy and Local History, List of works relating to. 1910	1.15
Automobile Tires. A list of references. 1923	.10	Chiaroscuro Prints, by Frank Weitenkamp. 1916	.05
Avery Collection, Handbook of. 1901. 84 p.	.50		

	PRICE		PRICE
City Planning and Allied Topics, Select list of works relating to. 1913	.15	Historical Prints and Early Views of American Cities. Catalogue of Exhibition. 1917	.05
Color Photography. 1924	.75	Holcroft, Thomas, A Bibliography of. By Elbridge Colby. 1922	.60
Columbus. Letter of Columbus on the discovery of America. Facsimile of the pictorial edition, with a new and literal translation, and a complete reprint of the four oldest Latin editions. 1892. Cloth	.50	Holt, John—Printer and Postmaster. 1920	.10
Commencement Addresses by Stephen H. Olin and Carl B. Roden. 1924	.10	Hudson, Henry, The Hudson River, Robert Fulton and Steam Navigation, List of prints, books, manuscripts, etc., relating to. 1909	.30
The Compensations, by Asa Don Dickinson. 1922	.05	The Illustrated Book, by Frank Weitenskampf. 1919	.05
Constitutions and Constitutional Law, List of books and articles on. 1904	.40	Illustrated Books of the Past Four Centuries. A record of the exhibition, 1919. 1920	.15
Cruise of the U. S. Brig <i>Argus</i> in 1813. Journal of Surgeon James Inderwick. 1917	.10	Inventory of the Rensselaerswyck Manuscripts. 1924	.25
Dehydrated Foods. A list. 1917	.05	Isle de Bourbon (Réunion) Documents, 1701-1710. Printed from the original manuscript in the Library. 1909	.20
Diplomatic History of the European War. A list of references. 1917	.10	Japanese-American Relations. A list of works. 1921	.40
Does New York Know New York? Its Library, for Instance, by Edward J. O'Brien. 1919	Free	Jesuit-Huron Relation of 1648-1649—A hitherto unknown edition of. By V. H. Paltsits. 1923	.05
Druids and Druidism. A list of references. 1920	.05	Journalism. A bibliography. 1924	2.00
Early American Poetry, 1610 to 1820. A list of works. 1917	.20	Joys of Librarianship, by Arthur E. Bostwick. 1918	.05
Echo-Device in Literature. By Elbridge Colby. 1920	.25	Kennan Collection. By Abraham Yarmolinsky. 1921	.10
Egypt, Ancient. Sources of Information. 1925	2.75	Latin-American Periodicals Current in the Reference Department. 1920	.05
Emmet Collection of Mss., Prints, etc., Catalogue of. Sheets. 1900	5.00	Letters of American Clergymen, 1711 to 1860. 1917	.05
Eno Collection of New York City Views. 1925	.75	Letters of American Physicians and Surgeons. 1919	.05
Flatboating on the Yellowstone, 1877. By Fred G. Bond. 1925	.25	The Librarian Himself, by H. L. Koopman. 1916	.05
Folk Music of the Western Hemisphere. 1925	.50	Librarian as a Unifier, by Andrew Keogh. 1915	.05
Foreign Plays in English. A list of translations. 1920	.80	Library Tonic, by George Parker Winship. 1917	.05
Geology, Mineralogy and Palæontology of New Jersey, List of works on. 1916	.15	Library's Print Room, by Frank Weitenskampf. 1915	Free
Gypsies in Carniola and Carinthia, by Albert Thomas Sinclair. 1917	.05	Lycanthropy. A list of works. 1920	.05
Gypsies of Monastir, by Rev. Lewis Bond. 1917	.05	The Manuscript Division, by Victor Hugo Paltsits. 1915	.15
Heritage of the Modern Printer, by Margaret B. Stillwell. 1916	.05	Minimum Wage. A preliminary list of selected references. 1913	.10
Historical Printing Club, Publications of the. (List and prices furnished upon application.)		Mountaineering. Selected list. 1916	.05

	PRICE		PRICE
Music Publishers in New York City before 1850. A directory. 1917	.10	Spalding Baseball Collection. 1922	.20
Nationalization of Coal Mines. 1920	.10	Spencer Collection of Modern Book Bindings. 1914	.15
Naval Architecture and Shipbuilding. A list of references. 1919	.20	Stauffer Print Collection, by Charles Allen Munn. 1916	.05
The New York Public Library and the Business Man. 1923	Free	Storage Batteries. A list of references, 1900-1915. 1915	.15
Newspapers and Official Gazettes, Checklist of. 1915	1.85	Submarines. A list of references. 1918	.35
Numismatics. List of works. 1914	.65	Superstructures, by W. N. C. Carlton. 1918	.05
Old Prints in the Prints Division. 1918	.05	Thirty-six Books. 1921	Free
Oxy-Acetylene Welding. List. 1914	.15	Tilden, S. J. Letters and Literary Memorials, edited by John Bigelow. 2 v. 1908	6.00
Pageants in Great Britain and the United States. A list of references. 1916	.15	Tilden, S. J. Writings and Speeches, edited by John Bigelow. 2 v. 1885	6.00
Paintings, Catalogue of, in the picture galleries of the Library. 1912	.10	Timothy Dexter and His "Pickle for the Knowing Ones." 1922	.15
"Parnassus" Tapestry in the Library, by George Leland Hunter. 1915	.05	To Nebraska in '57. A Diary of Erasmus F. Beadle. 1923	2.00
Persia, List of works relating to. 1915	.50	Torpedoes. A list of references. 1917	.30
The Photostat in Reference Work. 1925	.15	War Memorials. A list. 1919	.05
The Pitcairn Bible. 1924	.15	War Taxation, 1914-1917. A list of references. 1917	.05
A Poe Manuscript. By T. O. Mabbott. 1923	.10	Washington Eulogies. A checklist. 1916	.25
Prints: Recent Additions to the Print Collection. 1923	.05	Washington's Note Book. Selections from a newly discovered manuscript, edited by Victor Hugo Paltsits. 1920	.05
Prints and their Production: Supplement. 1917	.05	Water Supply of the City of New York, Exhibition illustrating the history of, from 1639 to 1917. 1917	Free
Rembrandt, Exhibition of Etchings by. 1917	Free	What Did Macaulay Say About America? Text of four letters to Henry S. Randall. 1925	.40
Robinson Locke Dramatic Collection. 1925	.10	What's the Matter with the Public Library, by E. L. Pearson. 1922	Free
Romani and Dard, by George F. Black. 1916	.05	Why They Came to the Library. 1920	Free
Russian, other Slavonic and Baltic Periodicals, A list of. 1916	.15	Winthrop, Theodore, Bibliographical notes on, by Elbridge Colby. 1917	.05
Schoolroom Decoration. A list of references. 1917	.05	Winthrop Books, Plates of the, by Elbridge Colby. 1918	.05
Scientific Management. A list of references. 1917	.25		
Scotland. A list of works. 1916	3.00		
Shakespeareana, Catalogue of Exhibition of, compiled by Henrietta C. Bartlett. 1916	1.00		
Small Library about a Great City. 1923	Free		
The Soul of the Library, by J. I. Wyer. 1923	.05		

MUNICIPAL REFERENCE LIBRARY

Publications to be obtained at the Municipal Reference Library, Room 512, Municipal Building.

	PRICE
Guide Posts on the Road to Health; A list of books	.10
Teaching Citizenship via the Movies. A survey of civic motion pictures	.10
Visualizing Citizenship	.15
What to Read on New York City Government. A list of references	.05

CIRCULATION DEPARTMENT

Publications to be obtained at any Branch Library, or from the Chief of the Circulation Department, 476 Fifth Avenue. Publications given free unless otherwise stated.

Branch Library Book News. See Periodicals.

LISTS OF BOOKS FOR ADULTS

Altman Collection
 Books of Interest to Women Voters
 Catalogue of Books for the Blind in Revised Braille. Grades One, Two and Three. November, 1921; Supplements, December, 1922, January, 1925
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